



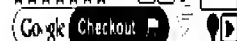
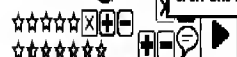
Google



durable read change data page flush transaction log buffer persistent data store

Search

Advanced Search



Web

Results 1 - 100 of about 6,020 for durable read change data page flush transaction log buffer persistent data store. (0.54 seconds)



Show options...

# 1. [Berkeley DB Data Store - Elephant User Manual](#)

:transaction This argument is for advanced use. It tells the Berkeley DB ... This internal function forces the **transaction log** to be **flushed** and all active **data** to be ... Finally, copy the resulting **data** to stable **storage**. Read the Berkeley DB ... :berkeley-db-cachesize - **Change** the size of the **buffer** cache for ... common-lisp.net/project/.../Berkeley-DB-Data-Store.html - [Cached](#) - [Similar](#)

## 2. [John Huang's Blog on SQL Server and .Net: 2010/05](#)

Any **data** modification to **persistent data** in the **data** files will be at least implicitly involved in a **transaction**. ... What if the **transaction** has been committed but the modified **data page** has not ... **Log** writer is the process to **flush** the **log buffer** to disk. ... Run Dynamic T-SQL from a Function with **Data Change**. ... sqlx.blogspot.com/2010\_05\_01\_archive.html - [Cached](#)

### 3. [John Huang's Blog on SQL Server and .Net](#)

Any **data** modification to **persistent data** in the **data** files will be at least ... SQL Server will roll forward the **transaction** and make up the **data page**. ... **Log** writer is the process to **flush** the **log buffer** to disk. .... can also be **read** in this way as I mentioned in my first blog that encrypted **data** gets decrypted ... sqlx.blogspot.com/ - [Cached](#) - [Similar](#)

Show more results from sqlx.blogspot.com

## 4. [Exchange Transactions and the Exchange Database Overview](#)

**Durable** Committed transactions are preserved in the database even if the system fails. ... **Log** writer As the buffers fill up, ESE moves the **data** from the buffers onto ... **Lazy** writer At this point, ESE must **flush** the dirty **pages** out of memory. .... in memory: **transaction log** buffers, **data** cache, and version **store**. ...

technet.microsoft.com/en-us/.../aa996118(EXCHG.65).aspx - [Cached](#) - [Similar](#)

## 5. [SQL Server 2000 I/O Basics](#)

Jan 21, 2005 ... Earlier versions of SQL Server use 2-KB **data** and **log pages**. ... SQL Server 7.0 and SQL Server 2000 Logging and **Data Storage** .... All SQL Server **transaction log** and database file I/O is ..... It is a clear sign that the **page** was changed, **flushed** to disk, and **read** back in; however, the **change** was not ...  
technet.microsoft.com/en-us/library/cc966500.aspx - [Cached](#) - [Similar](#)

[More results from technet.microsoft.com »](#)

## 6. [Transaction log](#) - Wikipedia, the free encyclopedia

In the field of databases in computer science, a **transaction log** (also database log or ... Physically, a log is a file of updates done to the database, stored in stable **storage**. ... Update Log Record notes an update (**change**) to the database. ... If all dirty **pages** are **flushed** while creating the checkpoint (as in ...  
en.wikipedia.org/wiki/Transaction\_log - [Cached](#) - [Similar](#)

## 7. [Extensible Storage Engine](#) - Wikipedia, the free encyclopedia

An ESE database may contain up to 232 **pages**, or 16 terabytes of **data**, ..... Synchronously **flushing** the **log** makes ESE transactions **durable**. ... Since a **transaction** may make changes based on **data read** that has already been updated in ... Modifications of the copy **buffer** do not automatically **change** the stored **data**. ...  
en.wikipedia.org/wiki/Extensible\_Storage\_Engine - [Cached](#) - [Similar](#)



[Show more results from en.wikipedia.org](#)

## 8. [\[PDF\] Modular Data Storage with Anvil](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by M Mammarella - [Related articles](#)

Many **data storage** layouts only add or **change read-only**. dTables, which are significantly easier ..... Client code chooses start and end of each **transaction** ...  
www.sigops.org/sosp/sosp09/slides/mammarella-slides-sosp09.pdf - [Similar](#)

## 9. [\[PDF\] Modular Data Storage with Anvil](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by M Mammarella - [Related articles](#)

a **persistent commit log** (like the Anvil **transaction** library's system journal), an in-memory **buffer** (like .... (although, for example, a truly **read-only data store** wouldn't need one). ..... to explicitly **flush** the Anvil **transaction** (forcing synchronous ... actions

**durable**. This makes Anvil transactions lightweight, ...

[www.sigops.org/sosp/sosp09/papers/mammarella-sosp09.pdf](http://www.sigops.org/sosp/sosp09/papers/mammarella-sosp09.pdf) - [Similar](#)

#### 10. OTN Discussion Forums : About **Log Buffer** writhing.. ...

You can force the **buffer** to be **flushed** at any time simply by executing a **durable** commit within the **datastore**. A **durable** commit flushes all **log** starnds ...

[forums.oracle.com/forums/thread.jspa?threadID=1020060&tstart...](http://forums.oracle.com/forums/thread.jspa?threadID=1020060&tstart...) - [Cached](#)

#### 11. MySQL :: InnoDB 1.1 for MySQL 5.5 User's Guide (Early Adopter ...

These terms are commonly used in information about the InnoDB **storage** engine. ... Instead of **flushing** all modified **pages** from the **buffer** pool to the **data** files .... For the InnoDB Hot Backup product, the file name of the binary **log** and the .... A SQL statement that ends a **transaction**, making permanent any changes ...

[dev.mysql.com/doc/innodb-plugin/1.1/en/glossary.html](http://dev.mysql.com/doc/innodb-plugin/1.1/en/glossary.html) - [Cached](#)

#### 12. MySQL :: MaxDB series: Transactions

MaxDB does not have different **storage** engines like the MySQL Server. .... Undo information are stored by MaxDB on the **data** volumes. ... made by the **transaction** must be stored in a persistant, **durable** medium. ... Therefore it is great if you do not need to **flush** all modified **pages** from the **buffer** to the disk in case ...

[dev.mysql.com/tech-resources/.../maxdb-transactions.html](http://dev.mysql.com/tech-resources/.../maxdb-transactions.html) - [Cached](#) - [Similar](#)

#### 13. ADVANCED **DATA** MANAGEMENT FOR MMOG

**Page 1** .... memory space and/or proxy **data** server for real-time **read** response. ... memory based **transaction log** buffers which are asynchronously **flushed** to the disk ... treat them each as a virtual **datastore**. SQL92 type indexed queries can be .... to automatically **change** modes to provide synchronous **buffer flush** on ...

[www.versant.com/developer/.../objectdatabase/.../versant\\_in\\_mmog.pdf](http://www.versant.com/developer/.../objectdatabase/.../versant_in_mmog.pdf) - [Similar](#)

#### 14. General connection attributes

An implicit **transaction** commit is done before and after execution of DDL statements. .... The **log buffer** is shared among all connections and contains **log** records ... 1 - Connects to **data store** in **read** committed isolation mode (default). .... Scripting on this **page** enhances content navigation, but does not **change** ...

[www.filibeto.org/sun/lib/nonsun/oracle/11.2.0.1.../ttref155.htm](http://www.filibeto.org/sun/lib/nonsun/oracle/11.2.0.1.../ttref155.htm) - [Cached](#)

#### 15. Using JMS/XLA for Event Management

**Persistent**-mode XLA also allows multiple readers to access **transaction log** ... XLA filters out records associated with changes to the **data store** that have ... the **read** position of an XLA subscriber application in the **transaction log**. .... Scripting on this

**page** enhances content navigation, but does not **change** the ...  
duke.html-eonding.ac.at/~t.stuetz/download/.../jmsxla\_event.htm - [Cached](#)

#### 16. Atomic Consistent Isolated **Durable**

BullAnt have a fully **persistent** OO Virtual Machine and language which guarantees ...  
A **transaction** maintains **data** integrity constraints if, when starting with a .... mean the **data** itself, as another client may modify **change** it again in the future, ... and only after the logs are all right (including **flushing** the OS ...  
c2.com/cgi/wiki?AtomicConsistentIsolated**Durable** - [Cached](#)

#### 17. [PDF] Lightweight Recoverable Virtual Memory

File Format: PDF/Adobe Acrobat - [Quick View](#)  
**Page 1 ...** Goal: allow Unix applications to manipulate **persistent data** structures (such ... i.e. they **change** at the time of the crash from "all" to "nothing" even ... segment (master copy) and VM backing **store** (**durable** temp copy) => can ... o Inter-**transaction**: Coalesce no-**flush** log records at (**flush**) commit time. ...  
www.eecs.berkeley.edu/~brewer/cs262/Lec-LRVM.pdf

#### 18. [PDF] Stasis: Flexible Transactional **Storage** - Electrical Engineering ...

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by R Sears - [Cited by 16](#) - [Related articles](#)  
**persistent data** structures [20, 32]. We expect that Stasis ... dating portions of **durable storage**. These small atomic .... op(**data**) invoke redo write log undo/redo update **page** read memory ..... The update/**flush** variant allows the **buffer** manager's ..... records in the **transaction log**. Assuming log fragmen- ...  
www.eecs.berkeley.edu/~sears/publications/Stasis-OSDI.pdf

#### 19. Rhino.Queues.**Storage.Disk**

Aug 1, 2008 ... **Persistent Queue** is a singleton, which allow you to create sessions, ... You can see the **Flush()** call there. This call persist the actual enqueueing or dequeuing. ... Once all the items has been **read** from a file, and no more can be ... No **data** was written to the **transaction log** about all the entries ...  
ayende.com/Blog/archive/.../Rhino.Queues.**Storage.Disk**.aspx - [Cached](#) - [Similar](#)

#### 20. The Five-Minute Rule 20 Years Later - ACM Queue

We also assume that **page** tracking must be as **persistent** as the **data**; thus, a **buffer** pool's ... because its short access times permit very fast **transaction** commit. .... The pointer **change** in the parent **page** is logged in the recovery **log**, ..... which dirty **pages** are **flushed** from the **buffer** pool to **persistent storage**. ...  
queue.acm.org/detail.cfm?id=1413264 - [Cached](#)

21. [imqbrokerd\(1M\) – start a Message Queue broker instance \(man pages ...](#)

Mar 11, 2004 ... Back up a Master Broker's configuration **change** record to fileName . ... Delete the instance configuration file, **log** files, **data store**, and other files and directories ... Clear all **persistent data** in the **data store**, including messages, **durable** subscriptions, and **transaction** information store. ... docs.sun.com/app/docs/doc/816-5166/imqbrokerd-1m?a... - [Cached](#) - [Similar](#)

22. [I Want a New \*\*Data Store\*\* « Jeremy Zawodny's blog](#)

Apr 27, 2010 ... Front **Page** · About · Testing **Page** ... **Persistent** indexes to speed our most common queries. .... **change** the title to "I want a new **datastore** : 5k bounty (each)" ... we have quickly grown the **log data** and eventually hit barriers as ... However having your **data** in a **datastore** like Hadoop and being ... [blog.zawodny.com/2010/04/27/i-want-a-new-data-store/](#) - [Cached](#)

23. [\[PDF\] \*\*Data\*\* Management for Military and Aerospace Embedded Systems](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
For example, the **transaction log** can be written to **persistent storage** either ... on-disk database will perform many writes per transaction for **data pages**, ... docs.huihoo.com/.../**Data-Management-for-Military-and-Aerospace-Embedded-Syst.pdf** - [Similar](#)

24. [Dr Dobbs - High-Performance \*\*Data\*\* Management in Java](#)

High-performance **data** management involves on-disk **persistent storage**, .... The internal nodes comprise the map to the **data** in the on-disk **log** files that was .... locks and transactions (in which case, one random **read** is made per **transaction**). ... show the overhead necessary to make sure that the **data** is **durable**. ... [www.drdobbs.com/184406147](#) - [Cached](#)

25. [Berkeley DB Reference Guide: \*\*Transaction\*\* tuning](#)

Berkeley DB Reference Guide: Berkeley DB Transactional **Data Store** Applications ... release **read** locks on cursors as soon as the **data page** is no longer referenced. ... threads of control must wait until those **log** records have been **flushed** to disk. ... In these cases, increasing the size of the **log buffer** can increase ... [sepp.oetiker.ch/subversion-1.6.4-rp/ref/transapp/tune.html](#) - [Cached](#)

26. [The Berkeley DB Package: DB 4.6.21 \*\*Change Log\*\*](#)

[#15309]; Fix a bug where memp\_trickle attempts to **flush** an infinite number ... Concurrent **Data Store** Changes: ... but take slightly more processing time to **read** and write. ... corruption when the sending of a bulk **buffer** resulted in an error. ... [#15386]; **Change transaction** checkpoint to wait only for **pages** being ...

sepp.oetiker.ch/subversion-1.4.6-rp/ref/changelog/4.6.html - [Cached](#)

## 27. [You Had Me At EHLO... : Exchange Server 2007 SP1 ESE Changes - Part 1](#)

Nov 30, 2007 ... Atomic - This means that a **transaction** state **change** is all or nothing. ... Within the database, **data** is stored in 8 KB database **pages**, ... As the database **pages** are changed, the **log buffer** is notified to commit the **change**, ..... A more efficient dirty **page flushing** model for the **buffer** manager, ...  
msexchangeteam.com/archive/2007/11/30/447640.aspx - [Cached](#) - [Similar](#)

## 28. [Storage Layer](#)

Presents the features of Berkeley DB for use as a **data storage** layer. ... as **persistent** graphs of Java objects, or as opaque unstructured **data** in ... A write-ahead **transaction log** maintains undo/redo information for all actions ... is not considered **durable** until it has been fully written to the storage media, ...  
www.oracle.com/technology/products/berkeley.../storage-layer.html - [Cached](#)

## 29. [imqbrokerd\(1M\) - SunOS man pages](#)

-backup fileName: Back up a Master Broker's configuration **change** record to fileName. ... Delete the instance configuration file, **log** files, **data store**, and other files and ... store: Clear all **persistent data** in the **data store**, including messages, **durable** subscriptions, and **transaction** information store. ...  
docsun.cites.uiuc.edu/sun\_docs/C/.../imqbrokerd.1m.html - [Cached](#) - [Similar](#)

## 30. [\[PDF\] Buffer Management](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
holding relevant parts of the **persistent** DB; mediator ... when the update **transaction** is long gone. ■ **Durable** storage. .... Assume B-tree with 10 times less **pages** than **data store** ... recently **read** into **buffer** experiences a burst of correlated .... Pre-Fetching and Pre-**Flushing** (cont.) • Pre-Fetching (cont.) ...  
www.cs.iit.edu/~cs525/slides/chapter3.pdf - [Similar](#)

## 31. [Berkeley DB Reference Guide: Transaction tuning](#)

Berkeley DB Reference Guide: Berkeley DB Transactional **Data Store** Applications ... This flag allows **read** operations to potentially return **data** which has been ... threads of control must wait until those **log** records have been **flushed** to disk. ... In these cases, increasing the size of the **log buffer** can increase ...  
www.cs.sunysb.edu/documentation/BerkeleyDB/ref/.../tune.html - [Cached](#)

## 32. [\[PDF\] Dynamo: Amazon's Highly Available Key-value Store](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by G DeCandia - 2007 - [Cited by 281](#) - [Related articles](#)

**read** from its **data store**, and that its **data** needs to be available across multiple **data** centers. .... ensure that the **page** rendering engine can maintain a clear bound .... the number of **transaction** aborts. Oceanstore resolves conflicts by ..... Edition, MySQL, and an in-memory **buffer** with **persistent** backing store. ...

s3.amazonaws.com/.../sosp/amazon-dynamo-sosp2007.pdf - [Similar](#)

### 33. [\[PDF\] How Flash Memory Changes the DBMS1 World](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by HO Norheim - [Cited by 4](#) - [Related articles](#)

a smaller **buffer** and disk as permanent **storage** of large **data** volumes as well as ... to latency, either it is **page read** requests, or **transaction log page** .... **persistent storage**, at least log writes would have to be **flushed** to disk at ...

hansolav.net/blog/content/binary/HowFlashMemory.pdf - [Similar](#)

### 34. [\[PDF\] Microsoft PowerPoint - Transactions-Recovery](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

Force the **log** record for an update before the corresponding **data page** gets to disk. ...

Extension of **log** on mass **store**. • Periodically **flushed** to mass **store** ... Other

**transaction** can **read** the value from the **buffer** (saves **read** access to ... record in **log buffer**, ensuring **transaction's** updates are **durable** before (or ...

www.cse.iitb.ac.in/~cs317/Resources/.../Transactions-Recovery.pdf - [Similar](#)

### 35. [Introduction](#)

The cache is both **read**- and write-cache, as **pages** are **flushed** onto the disk not until a checkpoint. ... changes concerning the proper **data** is written into the "stable **store**". ... This works as follows: the log manager states that the **transaction log** has ... **Durable** subscriber definitions are stored in single files. ...

www.swiftmx.de/products/router/swifitlets/sys\_store/.../index.html - [Cached](#)

### 36. [tune.html](#)

This means applications modifying large key/**data** items also write large **log** records, and, in the case of the default **transaction** commit, ... <dt>**log buffer**

size<dd>Berkeley DB internally maintains a **buffer** of **log** writes. ... to write a dirty **page** in order to have space in which to **read** a new **page** from the backing ...

opensource.apple.com/source/BerkeleyDB/BerkeleyDB.../tune.html - [Cached](#)

### 37. [\[PPT\] Transactions in a Flash](#)

File Format: Microsoft Powerpoint - [View as HTML](#)

Slow: 6  $\mu$ s versus 65 ns for **read**; Each bit can **change** from 1 to 0; but not back ...

RVM's **Transaction Log**. Circular disk-based log; Truncation forces updates to

actual ... Compiles 38 of its own files; Stores **data** in **persistent heap** ... Effect of background truncation on throughput; Allow **page-buffer** use on small ...  
morgannprice.org/MASTERS96\_flash.ppt

38. [kennygorman.com](http://kennygorman.com)

When using any **persistent data store** that is not ACID compliant, something must ...  
But not guaranteed depending on I/O capabilities of **durable** systems. ... and focus on just durability or focus on durability plus **read** scalability. ... everyone running PostgreSQL in a high **transaction**/high availability environment. ...  
www.kennygorman.com/ - 21 hours ago - [Cached](#) - [Similar](#)

39. [\[PDF\] Flash memory](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by G Graefe - 2007 - Cited by 19 - [Related articles](#)  
dirty **data** from the **buffer** pool to **persistent storage**. ... fast **transaction** commit.  
However, limitations in write ..... checkpoints that **flush** the recovery **log** and any dirty **data** in ... **page** sizes for both media requires a **change** in **buffer** man- .... **read** from flash memory into RAM, and then the **page** must ...  
www.cs.cmu.edu/~damon2007/pdf/graefe07fiveminrule.pdf - [Similar](#)

40. [\[PDF\] Breaking the Disk Barrier with In-Memory DBMS Technology: Sybase ...](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
to stream **log data** to nonvolatile **storage**, such as disk or solid state memory. ...  
**flushed** at this point. In others, the **buffer page** table is updated to indicate ... (Atomic, Consistent, Isolated, **Durable**) properties of a database **transaction**, is ... Users can move **read**-only database workloads to IMDB with no ...  
www.sybase.com/files/.../IDC-Breaking-disk-barrier-with-IMDB-AR.pdf

41. [The Recovery Manager of the System R Database Manager](#)

by JIM GRAY - 1981 - Cited by 370 - [Related articles](#)  
**transaction**. • **READ SAVE** returns the **data** saved in the **log** by the application at a designated save point. ... and **durable**. This model of recovery is a subset of the ... All **persistent** System R **data** are stored in ..... The RSS maintains two **buffer** pools: a pool of 4-kilobyte **data pages** and another pool ...  
www.cc.gatech.edu/classes/AY2005/cs6210\_spring/papers/recovery.pdf

42. [Understanding Information Store Essentials \(Part 2\) | MessagingTalk](#)

Nov 24, 2005 ... All **data** is **read** from and written to the disk in units of 4KB. ... **Durable** – Once a transaction has completed then it is permanent. ... **Transaction log** files help to achieve this, ensuring that a database can always be .... **Read page 7** into a memory **buffer** (ESE will verify the checksum as described ...



[www.messagingtalk.org/content/252.html](http://www.messagingtalk.org/content/252.html) - [Cached](#) - [Similar](#)

#### 43. [\[PDF\] Notes on the Oracle/Database Problem](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

BigTable demonstrated that **persistent** record storage could be scaled to thousands ...

I haven't yet tested the facts first-hand on **data store** .... replication strategy that requires **log(N)** hops to **read/write** a key-value pair. .... incredible **transaction** rates.

The best I've seen on any of the other systems is ...

[www.cattell.net/datastores/Datastores.pdf](http://www.cattell.net/datastores/Datastores.pdf) - [Similar](#)

#### 44. [\[PDF\] CISC 499\\*: Transactions and Data Stream Processing](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by N Conway - 2008 - [Related articles](#)

“**store** and query” model: **data** is stored permanently in the database, and ..... **log flush**: all remaining stream tuples are **flushed** to disk, ... a separate **transaction log** describing each incremental **change**. .... stable **buffer** associated with each stream input source. .... Management of **Data**, pages 44–54, 1994. ...  
[neilconway.org/docs/stream\\_txn.pdf](http://neilconway.org/docs/stream_txn.pdf)

#### 45. [Transactions in a Flash](#)

Big **log** bandwidth savings! – Writes 548 vs. 748 bytes • Flash requires compact ...  
Effect of background truncation on throughput • Allow **page-buffer** use on small ...  
Forcing **persistent** writes to Flash – **Flushing** stale **data** upon erase 52 ... 162 views;  
A-DATA 32 GB SDHC Class 6 Flash Memory Card 32GSDHC6 (Blue) 173 ...  
[www.slideshare.net/Flashdomain/transactions-in-a-flash](http://www.slideshare.net/Flashdomain/transactions-in-a-flash) - [Cached](#)

#### 46. [Transaction Logging Concepts](#)

Jul 20, 1997 ... The same **log** record that was used to make the initial **change** can also be ... This means that when the database manager writes a **log buffer** to disk ... Since transactions must be **durable**, any committed **data** that were ..... Any previously written **data store** in the extents is not removed or zeroed. ...  
[www.fast4gl.com/downloads/monographs/logging/logging.html](http://www.fast4gl.com/downloads/monographs/logging/logging.html)

#### 47. [Proceedings of the Workshop on Embedded Systems, March 29-31, 1999 ...](#)

by MI Seltzer - [Cited by 28](#) - [Related articles](#)

Tuning the design requires selecting a location for the **log** and **data** files .... This means that **transaction** systems are designed for permanent **storage** (most ... **data** must be copied from the **data** manager's **buffer** cache (or **data pages**) into .... and selects the amount of **log data** that can be **read** in that interval and ...  
[www.usenix.org/events/es99/full\\_papers/seltzer/seltzer\\_html/](http://www.usenix.org/events/es99/full_papers/seltzer/seltzer_html/) - [Cached](#)

48. [\[PDF\] \(Lightweight\) Recoverable Virtual Memory](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

Protect updates to **persistent data** structures. Use transactions .... Inter-transaction.

For no-**flush** transactions, discard old **log** records ...

[www.cs.nyu.edu/rgrimm/teaching/sp08-os/rvm.pdf](http://www.cs.nyu.edu/rgrimm/teaching/sp08-os/rvm.pdf) - [Similar](#)

49. [In Recovery... | Paul S. Randal on SQL Server](#)

30-09) backups **read data** through the **buffer** pool .... Now I'll commit the nested transaction, run a checkpoint (which will clear all possible **transaction log** in the .... In SQL Server 2005 (and 2008) you can **change** the behavior of lock .... subsystem (e.g. a **persistent** stale **read** issue) then the corruption will ...

[www.sqlskills.com/blogs/paul/](http://www.sqlskills.com/blogs/paul/) - [Cached](#) - [Similar](#)

50. [Amazon's Dynamo - All Things Distributed](#)

Oct 2, 2007 ... This paper describes Dynamo, a highly available **data storage** technology that ... **page** rendering engine can maintain a clear bound on **page** delivery each service ..... MySQL, and an in-memory **buffer** with **persistent** backing store. .... failed database accesses due to lock-contention and **transaction** ...

[www.allthingsdistributed.com/2007/.../amazons\\_dynamo.html](http://www.allthingsdistributed.com/2007/.../amazons_dynamo.html) - [Cached](#) - [Similar](#)

51. [Data Store Attributes](#)

1 (Write **data** to **transaction log** files using buffered writes. .... 1 - Connects to **data store** in **read** committed mode (default). Windows ODBC **Data Source** ...

[database.in2p3.fr/doc/oracle/Oracle\\_Database.../attribute.htm](http://database.in2p3.fr/doc/oracle/Oracle_Database.../attribute.htm) - [Cached](#)

52. [APPARATUS AND METHOD FOR LOG BASED REPLICATION OF DISTRIBUTED ...](#)

For other databases, the **transaction log** is circular and **pages** are archived and .... The transaction generates **change data** and transaction control records. ... acts as a proxy for the CP to **read** the **persistent**, commit-ordered queues generated ... the **buffer** is **flushed** and the information is sent back to the CP 118. ...

[www.faqs.org/patents/app/20090217274](http://www.faqs.org/patents/app/20090217274) - [Cached](#)

53. [FUSE Message Broker v5.3 Release Notes - Product Information ...](#)

MB-447: File index.html in the /docs folder points to the incubator **page** ... MB-436:

**Change** the InactivityMonitor to clear its flag as soon as a few bytes are ... id ID:...

could not be recovered from the **data store** - already dispatched ... AMQ-2021:

**durable** subscriber gets stuck while using **persistent** delivery ...

[fusesource.com/.../FUSE+Message+Broker+v5.3+Release+Notes](http://fusesource.com/.../FUSE+Message+Broker+v5.3+Release+Notes) - [Cached](#) - [Similar](#)

54. [InformIT: Sams Teach Yourself Microsoft SQL Server 7 in 21 Days ...](#)

**Durable**— A transaction is said to be **durable** if the work is guaranteed to remain ...  
Conversely, you cannot **read** another transaction's **data** if it's in the .... The new row is  
recorded in the **transaction log**, and then the **data page** for ... SQL Server uses to  
"**flush**" (or copy) the **data pages** from memory to disk. ...  
[www.informit.com/library/content.aspx?b=STY\\_Sql...](http://www.informit.com/library/content.aspx?b=STY_Sql...) - [Cached](#) - [Similar](#)

55. [\[PDF\] View or Download - CiteSeerX](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by K Ramamritham - Cited by 51 - [Related articles](#)  
**persistent storage** for space reasons because of the Steal **buffer** .... For example, let  
**transaction t1 read data** item x and **transaction t2 read data** item y. ...  
[citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.55.7005&rep...](http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.55.7005&rep...)

56. [In-Memory Database option for Sybase Adaptive Server Enterprise ...](#)

Feb 2, 2010 ... This capability enables you to treat memory-resident **data** the same  
way you ... Plus, it's quick, easy, and integrated. **Read** on to learn more. ... the  
commits (i.e. the physical writes to the **transaction log**). ... In other words, "**durable**"  
has been sacrificed for performance. ... Go to **page:** 1 2 Next ...  
[www.databasejournal.com/.../In-Memory-Database-option-for-Sybase-Adaptive-Server-Enterprise.htm](http://www.databasejournal.com/.../In-Memory-Database-option-for-Sybase-Adaptive-Server-Enterprise.htm) - [Cached](#) - [Similar](#)

57. [Exchange Server 2007 "SP1 ESE Changes – Part 1"](#)

Dec 1, 2007 ... ESE Cache - An area of memory reserved to the Information **Store**  
process (**Store.exe**) that ... Within the database, **data** is stored in 8 KB database  
**pages**. ... As the database **pages** are changed, the log **buffer** is notified to commit the  
**change**, and the transaction is recorded in a **transaction log** file ...  
[www.ditii.com/2007/.../exchange-server-2007-sp1-ese-changes-part-1/](http://www.ditii.com/2007/.../exchange-server-2007-sp1-ese-changes-part-1/) - [Cached](#)

58. [UNIX man \*\*pages\*\*: imqbrokerd \(1M\)](#)

Dproperty = value SunOS 5.9 Last **change**: 23 Sep 2002 1 System Administration ...  
Delete the instance confi- guration file, **log** files, **data store**, and other files ... store  
Clear all **persistent data** in the **data store**, including messages, **durable**  
subscriptions, and **transaction** information store. messages Clear all ...  
[www.s-gms.ms.edus.si/cgi-bin/man-cgi?imqbrokerd+1M](http://www.s-gms.ms.edus.si/cgi-bin/man-cgi?imqbrokerd+1M) - [Cached](#) - [Similar](#)

59. [O'Reilly Windows DevCenter Blog](#)

Mar 16, 2006 ... So you might be thinking that if you decrease the time to **flush** the  
mapped ... of WebSphere MQ is its implementation of **persistent** messaging. Similar  
to DB2, WebSphere MQ uses a **transaction log** ... If you need to **store** lots of **data**,  
you will need to be concerned ... Tools of **Change** for Publishing ...

[www.oreillynet.com/windows/blog/2006/03/](http://www.oreillynet.com/windows/blog/2006/03/) - [Cached](#) - [Similar](#)

## 60. [\[PPT\] Distributed Database Systems](#)

File Format: Microsoft Powerpoint - [View as HTML](#)

Permanent (reflecting an irreversible **change** in the behavior of the system) ...

Asynchronous – the **log** is moved to stable **storage** either periodically or when ...

**Flush** – BM flushes **buffer pages** updated by a **transaction** at the end of that ... LRM

tries to **read** the **data** item from the **buffer**. If the **data** is not in the ...

[dbgroup.cs.tsinghua.edu.cn/.../12.Distributed\\_DBMS\\_Reliability\(1\\_of\\_3\).ppt](http://dbgroup.cs.tsinghua.edu.cn/.../12.Distributed_DBMS_Reliability(1_of_3).ppt)

## 61. [Commercial Windows Azure is now live, along with cloud-based ...](#)

Feb 2, 2010 ... "Caching the **data** on the local drive can reduce the **read** traffic to the

**page blob**, which will lower the **transaction cost**," wrote Brad Calder this morning. ...

Note, even when the cache is enabled, all non-buffered and **flushed** writes are

committed transactions to the **Page Blob** in **durable storage**." ...

[www.betanews.com/article/...is...storage/1265131283](http://www.betanews.com/article/...is...storage/1265131283) - [Cached](#) - [Similar](#)

## 62. [Challenges in Embedded Database System Administration](#)

Tuning a design requires selecting a location for the **log** and **data** files, .... This means

that **transaction** systems are designed for permanent **storage** (most ... it must be

copied from the **data** manager's **buffer** cache (or **data page**) into the .... and selects

the amount of **log data** that can be **read** in that interval and ...

[www.eecs.harvard.edu/~margo/papers/.../paper.html](http://www.eecs.harvard.edu/~margo/papers/.../paper.html) - [Cached](#) - [Similar](#)

## 63. [\[PDF\] Review: The ACID properties](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

System may crash, but the disk is **durable** ... i.e. **data** is overwritten on (or deleted

from) the actual **page** ... **Buffer** manager decides when to **read** or write specific

**pages** ... **transaction** is not committed until all of its **log** records ... limited by oldest

unwritten **change** to a dirty **page**. ● **Store LSN** of most ...

[www.voneicken.com/courses/ucsb-cs290f-fa06/.../Lecture13.pdf](http://www.voneicken.com/courses/ucsb-cs290f-fa06/.../Lecture13.pdf) - [Similar](#)

## 64. [\[PDF\] New Abstractions for Fast Non-Volatile \*\*Storage\*\*](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

Begin **transaction**. 2. Perform operations. – Record the state of any **data** that is **read**

or written in a **log** to be played back later if the **transaction** fails ...

[www.flashmemorysummit.com/.../20090813\\_ThursPlenary\\_Coburn.pdf](http://www.flashmemorysummit.com/.../20090813_ThursPlenary_Coburn.pdf)

## 65. [Compact, flash-based SQL RDBMS for high-performance \*\*data\*\* ...](#)

It isolates the application writers from the details of **data storage**: they do not ... at the

end of each successful **transaction** that altered **persistent data**, ... When the system starts up, the snapshot is **read**, and then all appended ... and **durable**: the database file is treated as a series of **pages**, with a **page** map ...

[www.enea.com/Templates/Product\\_\\_\\_\\_\\_27040.aspx](http://www.enea.com/Templates/Product_____27040.aspx) - [Cached](#)

## 66. [Transaction Processing - Elsevier](#)

5.5.4 Using **Persistent** Savepoints 5.6 Terminological Wrap-Up ... 9.4.5 Allocate and **Flush Log** Daemons 9.4.6 Careful Writes: Serial of Ping- ... 11.2.2 **Transaction** Manager **Data** Structures ... 13.2 The File System as a Basis for Transactional **Durable Storage** 13.2.1 ... 13.4.2 Implementation Issues of a **Buffer** Manager ...  
[www.elsevier.com/wps/product/authors/677777](http://www.elsevier.com/wps/product/authors/677777) - [Cached](#)

## 67. [MySQL AB :: MySQL 5.0 Reference Manual :: 15.4.4.5 Defining \*\*Data\*\* Nodes](#)

Normal **read** and write operations use a similar **buffer**, whose usage is even more short-lived. ... If you wish to **change** this value for a running cluster, .... However, **transaction log** records are not **flushed** to disk as part of the commit. ... This value includes the writing of UNDO log records for **data pages**. ...

[mysql2.mirrors-r-us.net/.../mysql-cluster-ndbd-definition.html](http://mysql2.mirrors-r-us.net/.../mysql-cluster-ndbd-definition.html) - [Cached](#) - [Similar](#)

## 68. [Main-Memory Databases for Real-Time Telecom Applications](#)

by FF Prabhakar - [Related articles](#)

The system **data** is also stored in database files keeping the **storage** ... fact that in a main-memory database **pages** are not **flushed** to disk during ... By keeping the **persistent log** as a collection of mostly redo entries, .... Main-memory databases deliver real-time performance by **changing** the assumptions around ...

[www.lehigh.edu/~ffp206/dbstudy.pdf](http://www.lehigh.edu/~ffp206/dbstudy.pdf)

## 69. [eXtremeDB in-memory database | Logic Technology](#)

Typical **read** and write accesses are at the level of a few microseconds, or less. .... But replication entails latency from the moment a primary **data store** is updated, ... where the image of the database is saved to **persistent** storage, ... many writes per transaction (**data pages**, index **pages**, **transaction log**, ...

[www.logic.nl/Products/Category/Embedded.../Databases.aspx](http://www.logic.nl/Products/Category/Embedded.../Databases.aspx) - [Cached](#)

## 70. [\[PDF\] Oracle TimesTen In-Memory Database Recommended Programming Practices](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

The second option is to allow the TimesTen **data store** to **flush** its in- ... that it cannot lose more than the in-memory log **buffer's** size worth of transactions). .... mode and intend to reuse a **durable** subscription in the future, you .... XLA is made **persistent** by keeping a bookmark in the **transaction log** ...

[www.jimdowling.info/tmp/research/oracle/times\\_ten\\_good\\_practices.pdf](http://www.jimdowling.info/tmp/research/oracle/times_ten_good_practices.pdf)

## 71. Good Practices

This causes every commit in that connection to **flush** the **transaction log** to ... it cannot lose more than the in-memory log **buffer's** size worth of transactions). ... between two accounts, require the **data store** to be in a **durable** state. .... Checkpoints reduce the amount of log **data** needed for **data store** recovery, ... [www.scribd.com/doc/275942/Good-Practices](http://www.scribd.com/doc/275942/Good-Practices) - [Cached](#) - [Similar](#)

## 72. [PDF] 1 Redo and Undo Optimizations in Oracle 10g Objectives What is ...

File Format: PDF/Adobe Acrobat - [Quick View](#)

Adjust the space **data** for the **log buffer** and release the allocation latch ... Pool to **store** UBA (undo byte address) and **change** vector pairs ... [www.tearmycc.com/RMOUG\\_2008\\_Conference/PDF/Haisley.pdf](http://www.tearmycc.com/RMOUG_2008_Conference/PDF/Haisley.pdf) - [Similar](#)

## 73. MySQL vs PostgreSQL - WikiVS

This is of considerable value to many **read**-mostly workloads. ... The InnoDB **storage** engine stores the **data** with the primary key, so primary key ... The InnoDB engine has an insert **buffer** that caches updates to secondary index .... Once an update has been committed to memory on two nodes it is considered **durable**. ... [www.wikivs.com/wiki/MySQL\\_vs\\_PostgreSQL](http://www.wikivs.com/wiki/MySQL_vs_PostgreSQL) - [Cached](#) - [Similar](#)

## 74. Coordinator **log transaction** execution protocol

by JW Stamos - 1993 - [Cited by 58](#) - [Related articles](#)  
commit log record, an end-**transaction log** record, a **data** manipulation log record .... cached information may let it **flush** a dirty **buffer page** without contacting any .... recovery is to **read** the redo-start-LSN from **persistent storage**. ... uses a stable log to ensure each committed transaction is **durable** in that its ... [www.springerlink.com/index/L8U51612277W2012.pdf](http://www.springerlink.com/index/L8U51612277W2012.pdf) - [Similar](#)

## 75. Slashdot | Object Prevalence: Get Rid of Your Database?

Mar 3, 2003 ... When doing a write, write to the DB and update/**flush** your cache as necessary. ... Almost all **pages** (**data** fetch/**change** + HTML generation) complete in about 0.001s. .... Things I want in a **persistent datastore**: .... don't affect your **data** in mid-**transaction**). Passes **Durable**, I suppose. I've **read** a few ... [developers.slashdot.org/article.pl?sid=03/03/03/1220222](http://developers.slashdot.org/article.pl?sid=03/03/03/1220222) - [Cached](#)

## 76. Computer Science 304 Introduction to Database Systems flashcards ...

Durability, If a transactions commits then that effect is **persistent** ... Forces the writing of **log** records before the **data page** is written. ... that commits a **transaction** only after all the transactions that modify **data** **read** by that ... Write-ahead logging write any db changes to the **log** in stable **storage** before ...

quizlet.com/.../computer-science-304-introduction-to-database-systems-flash-cards/  
- [Cached](#)

77. [\[PPT\] Ask The Expert](#)

File Format: Microsoft Powerpoint - [View as HTML](#)

In-Memory. Logging. LOG. **BUFFER** ..... Tx ..... Tx ..... Tx..... **Durable** ...  
TimesTen **Data Store** Recovery. TimesTen **Data Store**. 2. **Transaction Log**.  
Rollforward ... Save **data** from TimesTen to Oracle. Using a "FLUSH CACHE GROUP"  
command in TimesTen SQL ... Users now see personalized **pages** suited to their  
needs ...  
[www2.randallrhea.com/tt.ppt](http://www2.randallrhea.com/tt.ppt)

78. [\[PDF\] Unbundling Transaction Services in the Cloud](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by D Lomet - Cited by 7 - [Related articles](#)

A **log** manager for recovery. 3. A **buffer** pool for staging database I/Os. .... just provide  
**persistent store**, with unlimited scalability and de- ..... the **page** is **flushed** to disk, the  
abLSN must be made stable ..... The **data read** will be **transaction** consistent because  
no TC can **change** the **data**. ...  
[www-db.cs.wisc.edu/cidr/cidr2009/Paper\\_53.pdf](http://www-db.cs.wisc.edu/cidr/cidr2009/Paper_53.pdf) - [Similar](#)

79. [\(WO/2009/108409\) LOG BASED REPLICATION OF DISTRIBUTED TRANSACTIONS ...](#)

The **transaction** generates **change data** and transaction control records. ... the  
changes are shipped to a commit-ordered output queue (**persistent storage**). ... the  
**buffer** is **flushed** and the information is sent back to the CP 118. .... 2.1 **Read** the  
associated **transaction log** and capture a complete local transaction T. ...  
[www.wipo.int/pctdb/ja/wo.jsp?WO=2009108409&IA...](http://www.wipo.int/pctdb/ja/wo.jsp?WO=2009108409&IA...) - [Cached](#)

80. [KEEPING CARD DATA SECURE AT LOW COST - Security and Detection ...](#)

by AW Vaidya - 1995 - Cited by 3 - [Related articles](#)

**data read** only or will it be updated the capacity of **data storage** required ... Security  
against counterfeit and **data changing** a. **Durable** and long life card ...  
[ieeexplore.ieee.org/iel3/3531/10615/00491723.pdf?arnumber=491723](http://ieeexplore.ieee.org/iel3/3531/10615/00491723.pdf?arnumber=491723)

81. [Should I Use a Directory, a Database, or Both?](#)

Nov 1, 2001 ... **Durable**. Upon commitment of the **transaction**, its changes are  
guaranteed. Until the **transaction** commits, none of its actions are **durable** or  
**persistent**. ... The LDAP specification does not define the underlying **data store** for ....  
A if both are **read** immediately after the **change** is made to replica A. ...  
[support.novell.com/techcenter/articles/ana20011101.html](http://support.novell.com/techcenter/articles/ana20011101.html) - [Cached](#) - [Similar](#)

## 82. [\[PDF\] DataBlitz Main Memory DataBase System](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

Each **transaction** writes the following to the **log** tail: ... **Flush** dirty (updated) **pages** and note **transaction** information ... Support atomic transactions without requiring them to be **durable** ... Fine-grained locking (**read/write/intention**) ... memory, **persistent** memory). • Control **data** stored separately from **data** ...  
[www.dependability.org/wg10.4/timedepend/08-Rasto.pdf](http://www.dependability.org/wg10.4/timedepend/08-Rasto.pdf) - [Similar](#)

## 83. [\[PDF\] Berkeley DB](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)

by MA Olson - 1999 - [Cited by 187](#) - [Related articles](#)

Applications that do not require **persistent storage** can create databases that exist only in ... hood that any **read** operation will need to visit the disk .... to the **data** disk as **pages** move through the **buffer** cache. ... locks on demand over the course of the **transaction**, then **flush** the **log**, then release all locks. ...  
[www.n3labs.com/pdf/berkeleydb-overview.pdf](http://www.n3labs.com/pdf/berkeleydb-overview.pdf)

## 84. [SPECjAppServer2004 Result: WebSphere 6.1 Application Server on IBM ...](#)

Only the **data** inside the bean was cached. Durability Requirement Info: ... on the external **storage**. The log device contains two 5+P arrays. ... When there is not enough space in the memory **buffer** to **read** in or write additional **data pages**, ... Using the **transaction log**, transactions that started but did not complete ...  
[www.spec.org/.../results/.../jAppServer2004-20061218-00048.html](http://www.spec.org/.../results/.../jAppServer2004-20061218-00048.html) - [Cached](#)

## 85. [5分钟法则\(The Five minute Rule\) 百度文库](#)

May 12, 2010 ... If flash memory is part of the **persistent storage**, **page** movement between .... Not surprisingly, the system-wide checkpoints that **flush** the recovery **log** and optimal .... The current contents will be described in **persistent data** ... **pages** are **flushed** from more queue: [www.acmqueue.com](http://www.acmqueue.com) the **buffer** pool ...  
[wenku.baidu.com/view/f804a6c24028915f804dc23b.html](http://wenku.baidu.com/view/f804a6c24028915f804dc23b.html) - 4 hours ago

 [Get more results from the past 24 hours](#)

## 86. [MySQL Tutorial: Managing Transactions in MySQL](#)

Dec 16, 2008 ... **Durable**: Once any changes that result from a **transaction** are committed to .... A phantom **read** occurs when a user sees **data** in **transaction** B that ... In session two, **change** the isolation level and do a Select from studio. .... To continue to learn MySQL go to the top of this **page** and click on the ...  
[www.learn-mysql-tutorial.com/Transactions.cfm](http://www.learn-mysql-tutorial.com/Transactions.cfm) - [Cached](#) - [Similar](#)

## 87. [memcached: More Cache = Less Cash! | Rackspace Cloud Computing ...](#)



Jul 29, 2009 ... When you **store** your **data** into memcached, it's stored in memory. ... When it does **change**, your MySQL query cache is emptied for that table. ... First it writes to a **transaction log**, then to the actual table. .... volatile memory and a **durable transactional store** using database and **persistent storage**. ...  
[www.rackspacecloud.com/blog/.../memcached-more-cache-less-cash/](http://www.rackspacecloud.com/blog/.../memcached-more-cache-less-cash/)  
- [Cached](#) - [Similar](#)

#### 88. [Windows Azure Drive | Manish Kungwani's blog](#)

Mar 25, 2010 ... Caching the **data** on the local drive can reduce the **read** traffic to the **page** blob, which will lower the **transaction** cost. ... all non-buffered and **flushed** writes are committed transactions to the **Page Blob** in **durable storage**. ... Write – All non-buffered/**flushed** NTFS writes are sent to the OS driver, ...  
[manishkungwani.com/blog/?tag=windows-azure-drive](http://manishkungwani.com/blog/?tag=windows-azure-drive) - [Cached](#)

#### 89. [File System Extensibility and Reliability Using an in-Kernel Database](#)

Mar 9, 2005 ... One natural application of efficient and reliable **data storage** is a file system. .... **changing** the calling conventions as needed (e.g., **read** becomes a .... KBDBFS uses the **buffer** cache to store **data** before writing it to the block .... then the operation is either safely in the **transaction log**, ...  
[www.am-utils.org/docs/kdbfs-msthesis/index.html](http://www.am-utils.org/docs/kdbfs-msthesis/index.html) - [Cached](#)

#### 90. [\[PDF\] Freelance Graphics - RestartRecovery.PRZ](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
All this application activity causes WMQ to create **durable data** to ensure ... The next **transaction-related log** record is an End Phase1 Commit record. .... The **log** is read forward from this point. Any **log** record for a **change** to a **page** with a redo ..... **Page Buffer** Total Unused Persist Nonpersist Restart Expansion ...  
[guide.webspheremq.fr/lmd\\_faqrq.php/?nom\\_doc=GSF\\_MQ...](http://guide.webspheremq.fr/lmd_faqrq.php/?nom_doc=GSF_MQ...) - [Similar](#)

#### 91. [ODBMS Industry Watch](#)

This is a presentation of a NoSQL **data store** given at the NoSQL workshop in Boston. .... than the dozens of index, join and **read** operations that SQL would need. .... providing transparent access and **transaction** processing of **persistent**, ... structures for **durable** storage and instantiating the same on retrieval, ...  
[www.odbms.org/blog/](http://www.odbms.org/blog/) - [Cached](#) - [Similar](#)

#### 92. [\[PDF\] solidDB for MySQL](#)

File Format: OpenDocument - [View as HTML](#)  
Transactional, **persistent** in-memory and disk-based engines in the same DBMS .... Every transaction sets a **read** level. **Data** with a higher **read** level, that is, .... **Transaction Log** (Redo Log). Primary **storage** of committed transactions ... Creating

a checkpoint means that all “dirty” database **pages** are **flushed** from ...  
cheyer.biz/files/talks/2006-11-15-solid-linuxworld-cologne.odp - [Similar](#)

93. [ChangeLog - memcachedb - Project Hosting on Google Code](#)

Project hosting will be **READ-ONLY** Wednesday at 7:30am PDT due to brief ... A distributed key-value storage system designed for **persistent**. .... **data** model any more, the structural **data storage** will be issued by .... add option "-L" to allow to set **transaction log buffer** ... Show details Hide details. **Change log** ...  
code.google.com/p/memcachedb/source/browse/trunk/**ChangeLog** - [Cached](#)

94. [Shadow paging - Patent 7389308](#)

by SJ Bailey - 2008 - [Related articles](#)  
Jun 17, 2008 ... A computer readable **storage** medium encoded with a computer .... A **durable transaction** is one in which the **change** in the state of the database is permanent. .... The user **data pages** 18 are **pages** that may contain database **data**, .... **flushing** referred to transmitting **data** to the **persistent** memory 80 . ...  
www.freepatentsonline.com/7389308.html - [Cached](#)

95. [\[PDF\] The Rio File Cache: Surviving Operating System Crashes](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by PM Chen - [Cited by 167](#) - [Related articles](#)  
The only time a file cache **page** is vulnerable to an unauthorized **store** is ... Kernels that use memory-mapping to cache files must be modified to map the file **read-only**. ... **buffer** cache **data** is now permanent. Third, memory's high throughput makes it ....  
**Durable** Memory RS/6000 System Design. In Proceedings of the ...  
cseweb.ucsd.edu/.../chen,ng,rajamani,aycock.the\_rio\_file\_cache.surviving\_operating\_system\_crashes.pdf

96. [\[PDF\] Shore-MT: A Scalable \*\*Storage\*\* Manager for the Multicore Era](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by R Johnson - 2009 - [Cited by 4](#) - [Related articles](#)  
ple **storage** managers must participate in a **transaction**. Given the need for high performance inside a single ... ground) so that changes to in-memory **data** become **durable**. .... Observation: **Page** allocations do not **change** often. Also, The .... blocking on a full **buffer** if necessary, then notify the **log flush** ...  
infoscience.epfl.ch/record/139059/files/p24-johnson.pdf

97. [\[PDF\] To BLOB or Not To BLOB: Large Object \*\*Storage\*\* in a Database or a ...](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by R Sears - 2007 - [Cited by 11](#) - [Related articles](#)  
**change** is aligned on database **pages**. (How likely that ... **flushed** to disk. Finally, the

new file is renamed to the ... **transaction**. Complete transactions are applied to the .....  
size of the write requests, we use a 64K write **buffer** ... evaluated the **read**  
performance of the two systems on a clean **data store**. ...  
[arxiv.org/pdf/cs.DB/0701168](https://arxiv.org/pdf/cs.DB/0701168) - [Similar](#)

98. [Hippocratic Databases: Extending Current \*\*Transaction\*\* Processing ...](#)

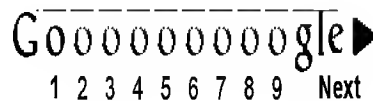
by M Kirchberg - 1899 - [Related articles](#)  
entries from the **transaction log** while preserving fundamental **data**, crash and media  
recovery properties. .... to **read** out the value from the Master Record) and a ... the log  
tail and **flush** all modified log **pages** as ... the entire) database on **persistent storage**  
has been lost / damaged. In order to do so, ...  
[doi.ieeecomputersociety.org/10.1109/HICSS.2010.220](https://doi.ieeecomputersociety.org/10.1109/HICSS.2010.220)

99. [\[PDF\] \*\*Data Storage\*\* Considered Modular](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by MD Mammarella - 2010 - [Related articles](#)  
abstracts the file-system-specific mechanisms that keep **persistent data** both  
consistent .... request that the **storage** system **flush** the **change** corresponding ...  
[www.cs.ucla.edu/~mikem/dissertation.pdf](http://www.cs.ucla.edu/~mikem/dissertation.pdf)

100. [\[PDF\] Anatomy of a Database System - Bowdoin College](#)

File Format: PDF/Adobe Acrobat - [Quick View](#)  
by JM Hellerstein - Cited by 8 - [Related articles](#)  
To **flush** a **buffer** pool **page** to disk, a thread generates an I/O .... Processes, there will  
be a process per **log** disk, to **flush** the **log** tail, and to **read** the ..... the choice of the  
**persistent storage** interface to use. .... **READ UNCOMMITTED**: A **transaction** may  
**read** any version of **data**, committed ...  
[www.bowdoin.edu/~ltoma/teaching/.../AnatomyOfADBSystem.pdf](http://www.bowdoin.edu/~ltoma/teaching/.../AnatomyOfADBSystem.pdf) - [Similar](#)



---

durable read change data page flush transaction log buffer persistent data store	Search
--	--------

[Search within results](#) - [Language Tools](#) - [Search Help](#) - [Dissatisfied? Help us improve](#) - [Try Google Experimental](#)

[Web Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) ▼
[Sign in](#)

Google scholar

durable read change data page flush transaction

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)

Scholar



Articles and patents

anytime

include citations

Results 1 - 100 of about 147. (0.28 sec)

eNVy: a non-volatile, main memory storage system[postech.ac.kr](#) [PDF]

M Wu, W Zwaenepoel - ... of the sixth international conference on ..., 1994 - portal.acm.org  
 ... nology matures, Flash has the potential to become very durable. A Flash chip normally operates in an EPROM-like read only mode. All other functions are initiated by ... ally involves a series of program and verify steps until the desired data is actually changed on the chip. ...

Cited by 232 - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)[HTML] Berkeley db[usenix.org](#) [HTML]

MA Olson, K Bostic, M Seltzer - ... of the FREENIX Track: 1999 USENIX ..., 1999 - usenix.org  
 ... Read-only applications can use Berkeley DB's memory-mapped file service to improve performance on most architectures. Configurable page size. ... They must be durable. ... When it finishes, the database will contain every change made by every transaction that ever committed. ...

Cited by 187 - [Related articles](#) - [Cached](#) - [All 16 versions](#)Integrating temporal, real-time, an active databases[psu.edu](#) [PDF]

K Ramamritham, R Sivasankaran, JA Stankovic, ... - ACM Sigmod ..., 1996 - portal.acm.org  
 ... purposes, some of the sensor readings and actuator control settings may be archived, that is, made durable. ... to NV-RAM if the validity is long enough for a NV-RAM write and read. ... Temperatures typical change slowly, but the values are used for many other critical calculations. ...

Cited by 51 - [Related articles](#) - [BL Direct](#) - [All 5 versions](#)Natix: A technology overview[psu.edu](#) [PDF]

T Fiebig, S Helmer, CC Kanne, G Moerkotte, J ... - Web, Web-Services, ..., 2002 - Springer  
 ... Each record is identified by a slot number which does not change even if the ... pro- cessing depends on primitives based on the proven foundation of atomic, durable and serializable ... The log manager provides the routines to write and read log records, synchronizing access of ...

Cited by 19 - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)[PDF] The recovery manager of a data management system[psu.edu](#) [PDF]

JN Gray, P McJones, M Blasgen, RA Lorie, TG ... - IBM Research Report ..., 1979 - Citeseer  
 ... is complicated to program and has the problem that the flight status may change during the ... application programs using the RDS can construct groups of RSS actions which are atomic and durable. ... To see why this is necessary, suppose a read lock on a record were released by ...

Cited by 33 - [Related articles](#) - [View as HTML](#) - [All 5 versions](#)

Method and apparatus for insuring database data integrity without data recovery logging

RW Lyle, JZ Teng, JA Yothers - US Patent 6,651,073, 2003 - Google Patents

... In order to make such a database system persistent or "durable", the data pages must be ... Unlike non-distributed databases where a single change is, or is not, made locally, all ... single thread process on the entire table and, consequently, it prevents concurrent read/write access ...

Cited by 3 - Related articles - All 2 versions

Anatomy of a native XML base management system

psu.edu [PDF]

T Fiebig, S Helmer, CC Kanne, G Moerkotte, J ... - The VLDB Journal, 2002 - Springer

... Special calls exist to avoid I/O for reading or writing newly allocated or deallocated pages ... a regular slotted page implementation, which maintains a collection of variable-length records on a data page. Each record is identified by a slot number which does not change even if the ...

Cited by 177 - Related articles - All 23 versions

[BOOK] Transaction processing: concepts and techniques

microsoft.com [PPT]

J Gray, A Reuter - 1993 - books.google.com

... LAN RPC random read memory record 1,000 - " local RFC sequential write record memofl process dispatch sequential read record 100 ... of the TP Monitor 312 6.3.1 The Central Data Structures of the TPOS 313 Data Structures Owned ... ii Contents 6.4.2 Durable Request Queues ...

Cited by 3488 - Related articles - Library Search - All 6 versions

[HTML] Journaling versus soft updates: Asynchronous meta-data protection in file systems

usenix.org [HTML]

MI Seltzer, GR Ganger, MK McKusick, KA ... - USENIX Annual ..., 2000 - usenix.org

... that focus on file systems and their performance, we do not see any change in this ... of the normal main memory is treated as a protected region, maintained with read-only protection ... it does not guarantee (as FFS does) that all meta-data operations are durable upon completion of ...

Cited by 165 - Related articles - Cached - All 24 versions

[CITATION] Implementing atomicity in two systems: techniques, tradeoffs, and experience

LF Cabrera, JA McPherson, PM Schwarz, JC Wyllie - IEEE Transactions on Software ..., 1993

Cited by 19 - Related articles - BL Direct - All 8 versions

Method and apparatus for efficiently recovering from a failure in a database that includes unlogged objects

RW Lyle, JZ Teng, JA Yothers - US Patent 6,567,928, 2003 - Google Patents

... In order to make such a database system persistent or "durable", the data pages must ... Unlike non-distributed databases where a single change is, or is not, made locally, all ... US 6,567,928 BI table and, consequently, it prevents concurrent read/write access by other applications ...

Cited by 6 - Related articles - All 2 versions

[PS] Sleepycat Software, Inc.

usenix.org [PS]

MA Olson, K Bostic, M Seltzer - usenix.org

... Read-only applications can use Berkeley DB's memory-mapped file service to improve performance on most architectures. 3.6. ... They must be durable. ... When it finishes, the database

will contain every **change** made by every **transaction** that ever committed. ...

[Related articles](#) - [View as HTML](#) - [All 237 versions](#)

### Checkpoint methods and systems utilizing non-disk **persistent** memory

GS Smith, SA Fineberg, P Mehra, R ... - US Patent App. 10/ ..., 2004 - Google Patents

... In this manner read or write commands are carried on RDMA-enabled SAN 306 to the CPMU's network interface (NI) 308. ... In a write operation initiated by processor node 302, for example, once data have been successfully stored in the CPMU, they are **durable** and will ...

[All 2 versions](#)

### Shore-MT: a scalable **storage** manager for the multicore era

[psu.edu](#) [PDF]

R Johnson, I Pandis, N Hardavellas, A ... - Proceedings of the ..., 2009 - portal.acm.org

... to disk (preferably in the background) so that changes to in-memory data become **durable**. ... and high-level index pages are accessed so frequently that even compatible read operations can ... to a **buffer** pool; however, as the number of active locks can **change** drastically over time ...

[Cited by 4](#) - [Related articles](#) - [All 20 versions](#)

### The design and implementation of a multilevel secure **log** manager

VR Pesati, TE Keefe, S Pal - sp, 1997 - computer.org

... However, it is possible with a minor **change** in the way paths are selected. ... It returns the **durable** LLSN which is on WADS for that level. The log-open-cursor interface provides a way of opening a cursor for **reading** log records. ...

[Cited by 8](#) - [Related articles](#) - [BL Direct](#) - [All 6 versions](#)

### Data processing node

M Lu, R Humborstad, O Sandsta, D ... - US Patent App. 11/ ..., 2006 - Google Patents

... **Page 17**. ... a high availability database include an ability to be implemented using standard hardware and software, and a standard **data** format compatible ... Thus conduct of **transaction** operations can continue unhindered by any delay in writing the records to the non-volatile storage. ...

[All 2 versions](#)

### [PDF] File system extensibility and reliability using an in-kernel database

[psu.edu](#) [PDF]

A Kashyap - Master's Thesis, State University of New York, Stony ..., 2004 - Citeseer

... A simple **change** such as adding an extra inode attribute for inode creation time would be difficult ... The database files can exist on any file system that provides standard read-write capabilities. ... Using the O\_SYNC option with open(2) provides **durable** writes, while also having the ...

[Cited by 10](#) - [Related articles](#) - [View as HTML](#) - [All 22 versions](#)

### [PDF] Main Memory Databases vs. Disk-Resident Databases

[psu.edu](#) [PDF]

A Aleahmad, H Amiri, M Rahgozar - Citeseer

... This would seriously **change** the architecture for a DBMS. ... we need to have **durable** transactions, each **transaction** should be committed to disk to make it **durable**. ... PERST is an application-oriented database, and is optimized for applications with dominated read access pattern. ...

[Related articles](#) - [View as HTML](#) - [All 3 versions](#)

### Modular **data storage** with Anvil

[psu.edu \[PDF\]](#)

M Mammarella, S Hovsepian, E Kohler - Proceedings of the ACM ..., 2009 - portal.acm.org

... Using fsync without the timestamp **change** is not ... durable within about 5 seconds (the default duration of ext3 transactions), as each ext3 **transaction** will make all completed Anvil transactions **durable**. ... Managed Yes Combines read-only and journal dTables into a read/write store ...

[Cited by 1](#) - [Related articles](#) - [All 12 versions](#)

### Platypus: Design and implementation of a flexible high performance object store

[150.203.164.35 \[PDF\]](#)

Z He, S Blackburn, L Kirby, J Zigman - Persistent Object Systems: Design, ... - Springer

... recovery, faulting of **data** into memory and the writing of both committed (**durable**) and uncommitted ... is to include them in **store** pages—a **store** page can then be read upon recovery ... changes must, by definition, leave the **page** in different states, a subsequent **change** could return ...

[Cited by 10](#) - [Related articles](#) - [BL Direct](#) - [All 20 versions](#)

### [PDF] A Snapshot Utility for a Distributed Object-Oriented Database System

[mit.edu \[PDF\]](#)

CH Moh - 2002 - pmg.lcs.mit.edu

... The Anti-MOB saves the state of **data** objects before they are modified so that the OR can later undo the modifications from a **page** on the disk to ... The MOB improves performance of the system by al- lowing installation read to be performed in a background flusher thread. ...

[Related articles](#) - [View as HTML](#) - [All 4 versions](#)

### [PDF] Sorting and Indexing with Partitioned B-trees

[psu.edu \[PDF\]](#)

G Graefe - Proc. of the 1st Int'l Conference on Innovative Data ..., 2003 - Citeseer

... traditional implementation of partitioning, each creation or removal of a partition is a change of the ... contain 1,000 records), and merge those at a cost of 9,000 records read, merged, and ... The initial **data** transfer (prior to committing the initial index) may omit **data** log- ging, similar ...

[Cited by 38](#) - [Related articles](#) - [View as HTML](#) - [All 4 versions](#)

### [PDF] Oracle Berkeley DB

[psu.edu \[PDF\]](#)

T Processing - Citeseer

... should understand the concepts from the Getting Started with Berkeley DB guide before **reading** this book ... See Non-Durable Transactions (page 19) for more information ... your **transaction** reads **data** "dirtied" by another **transaction**, but which subsequently might **change** before that ...

[View as HTML](#) - [All 100 versions](#)

### [PDF] Transaction Support for Log-Based Middleware Server Recovery Rui Wang\* i, Betty Salzberg 2, David Lomet\* 3

[microsoft.com \[PDF\]](#)

[1Microsoft, 3Microsoft Research](#)

WA Redmond - 2008 - research.microsoft.com

... **Transaction** systems guarantee that the transactional modifications to their resources are **durable**. ... If it finishes and aborts, we similarly only need its effect, which does not **change** any variable or ... When a method tries to read a shared variable, orphan detection for this variable is ...

[Related articles](#) - [View as HTML](#)

**[PDF] Integrated Data, Message, and Process Recovery for Failure Masking in Web Services**

[psu.edu](#) [PDF]

G Shegalov - 2006 - Citeseer

... engines, and databases distributed over multiple layers; they pose strong requirements for service and consistent **data** availability from both legal and business standpoints. ... survive subsequent system failures. Page 18. 2 1 Introduction ... The **transaction** (started at ...

[Cited by 1](#) - [Related articles](#) - [View as HTML](#) - [All 13 versions](#)

**[PDF] Data Storage Considered Modular**

[ucla.edu](#) [PDF]

MD Mammarella - 2010 - cs.ucla.edu

... requirements), and are themselves divided into parts that access **read-only data stores** and ... before committing the changes, so that the changes become **durable** atomically even if the ... so a **change** that affects  $n$  blocks requires at least  $n$  patches to represent. Each patch is ...

[Related articles](#) - [View as HTML](#)

**[PDF] CEDA Log Structured Store**

[cedanet.com.au](#) [PDF]

D Barrett-Lennard, WA Perth - 2010 - cedanet.com.au

... Serial elements never become heavily fragmented like files in a file system because serial elements are rewritten when they **change size**. ... **durable**. ... Therefore the LSS can provide very competitive read performance. 11 Supported Platforms ...

[Related articles](#) - [View as HTML](#)

**The impacts of write-through procedures and checkpointing on real-time concurrency control**

[psu.edu](#) [PDF]

TW Kuo, YH Hou, KY Lam - The Computer Journal, 2003 - Br Computer Soc

... Logical logging can **change** a long physical log into a record of only a few words [12]. ... Before a **transaction** reads (or writes) a **data** object, it must first **read-lock** (or write-lock) the ... the former **data** object is not later than the corresponding unlocking operation of the latter **data** object ...

[Cited by 3](#) - [Related articles](#) - [BL Direct](#) - [All 11 versions](#)

**[PDF] CISC 499\*: Transactions and Data Stream Processing**

[psu.edu](#) [PDF]

N Conway - 2008 - Citeseer

... Similarly, if the system guarantees that all committed **transaction** are **durable**, the application developer typically does not ... Streams are append-only, and queries on streams are read-only. ... In this section, we consider how a continuous query's snapshot should **change** over time. ...

[Related articles](#) - [View as HTML](#) - [All 5 versions](#)

**[PDF] ANU-Store: Design and Implementation of a Flexible High Performance Object Store.**

[psu.edu](#) [PDF]

Z He, SM Blackburn, L Kirby, J Zigman - Citeseer

... crash recovery, faulting of **data** into memory and the writing of both committed (**durable**) and uncommitted ... They are necessary for the calculation of **change deltas** ( $\Delta O \setminus O$ ), and they allow updates ... to include them in store pages—a store **page** can then be read upon recovery ...

[Related articles](#) - [View as HTML](#) - [All 2 versions](#)

**[PDF] Thorsten Fiebig Sven Helmer Carl-Christian Kanne Julia Mildenberger Guido Moerkotte Robert Schiele Till Westmann**

[psu.edu](#) [PDF]

**Fakultät für Mathematik und Informatik ...**



J Mildenberger - Citeseer

... the basic partition interface, which consists of a small set of block-level read/write functions. ... a regular slotted page implementation, which maintains a collection of variable-length records on a data page. Each record is identified by a slot number which does not change even if ...

[Related articles](#) - [View as HTML](#) - [All 11 versions](#)

### Method and apparatus for incremental undo

B Nainani, GC Ngai, W Huang, JD Klein, RJ ... - US Patent ..., 2001 - Google Patents

... Uncommitted transactions should not be durable. ... chip or cartridge, a carrier wave as described hereinafter, or any other medium from which a computer can read. ... then undo information from the rollback entry is retrieved from the undo record and a change is generated for the ...

[Cited by 9](#) - [Related articles](#) - [All 2 versions](#)

### Transactional file system

S Verma, TJ Miller, RG Atkinson - US Patent 7,613,698, 2009 - Google Patents

... "Implementing Distributed Read-Only Transaction ... Disk Drive Interface 32 v1 Optical Drive Interface 33 iszpx \Z Serial Port Interface 34 n,, n PROGRAM DATA 39 OTHER ... 3, 2009 Sheet 6 of 22 r 94 Version Commit LSN SOP Pointer State Flags Version Length Change Table Ptr ...

[Cited by 3](#) - [Related articles](#) - [All 6 versions](#)

### [PDF] SimpleDBM Developers's Guide

D Majumdar - [simplifiedbm.googlecode.com](http://simplifiedbm.googlecode.com)

... Eclipse is now setup to automatically rebuild SimpleDBM whenever you change any code.

1.2.6 Maven commands ... Latch Provides read/write latches that can be used to manage concurrency. ... The Write Ahead Log also uses storage containers to store its data. ...

[Related articles](#) - [View as HTML](#)

[googlecode.com](http://googlecode.com) [PDF]

### [PDF] Write optimized object-oriented database systems

K Nøravåg, K Bratbergsengen - Conf. of the Chilean Computer Science ..., 1997 - Citeseer

... When a transaction is committed, the data should really be durable. ... Traditional clustering works well as long as the access pattern is static, but if this happens to change, or access pattern is ... This block holds static volume information, and is only read when the system is started. ...

[Cited by 4](#) - [Related articles](#) - [View as HTML](#) - [All 7 versions](#)

[psu.edu](http://psu.edu) [PDF]

### [PDF] LLADD: Extensible Transactional Storage FIXME

R Sears, E Brewer, UC Berkeley - [tardis.cs.berkeley.edu](http://tardis.cs.berkeley.edu)

... This allows the location of data in the page file to change, even if outstanding transactions may have to roll back changes ... presented a relatively simple set of rules and patterns that a developer must follow in order to implement a durable, transactional and ... If the data read by the ...

[Related articles](#) - [View as HTML](#) - [All 2 versions](#)

[berkeley.edu](http://berkeley.edu) [PDF]

### [PDF] To appear in ASPLOS VI

M Wu, W Zwaenepoel - Citeseer

... This exceptional performance shows that as the technology matures, Flash has the potential

[psu.edu](http://psu.edu) [PDF]

to become very  **durable**. A Flash chip normally operates in an EPROM-like read only mode. All other functions are initiated by ... the desired  **data** is actually changed on the chip. Page 3. ...

[Related articles - View as HTML](#)

[PDF] LLADD: An Extensible Transactional Storage Layer

berkeley.edu [PDF]

R Sears, E Brewer, UC Berkeley - [tardis.cs.berkeley.edu](http://tardis.cs.berkeley.edu)

... This allows the location of **data** in the **page** file to **change**, even if outstanding transactions may have to roll back changes ... presented a relatively simple set of rules and patterns that a developer must follow in order to implement a **durable**, transactional and ... If the **data** read by the ...

[Related articles - View as HTML - All 2 versions](#)

**[CITATION]** Write optimized object-oriented database systems

K Norvag, K Bratbergsengen - Computer Science Society, 1997. Proceedings., XVII .... 1997

[Cited by 1](#) - [Related articles](#) - [All 3 versions](#)

**[PDF] Library Express-Interlibrary Loan Request**

wisc.edu [PDF]

R ARPACI-DUSSEAU - ACM Computing Surveys, 1981 - [pages.cs.wisc.edu](http://pages.cs.wisc.edu)

... To avoid service interruption, notify your local Post Office before change of residence: for a fee ...

System R recovery manager supports these commands and guarantees an atomic, durable execution. ... crash or disk dropped on the floor) or by software failure (bad data written on a ...

Related articles - All 4 versions

**[PDF] SimpleDBM RSS Developers's Guide**

[googlecode.com](https://googlecode.com) [PDF]

D Majumdar - [simpledbm.googlecode.com](http://simpledbm.googlecode.com)

... Eclipse is now setup to automatically rebuild SimpleDBM whenever you change any code ... A tuple is defined as variable sized blob of data that has a unique identity within the tuple ... When reading back, the type code is used to lookup a factory for creating the object of the correct ...

[Related articles](#) - [View as HTML](#) - [All 2 versions](#)

## Recovery guarantees for internet applications

psu.edu [PDF]

R Barga, D Lomet, G Shegalov, G ... - ACM Transactions on ..., 2004 - portal.acm.org

... Since the sender must make its state **durable**, there is low cost of also taking responsibility for ensuring that the message is ... However sometimes, physical logging is inevitable, for example, when **reading** the real-time clock. ... Ids for processes, threads, or users may also **change**. ...

Cited by 35 - Related articles - All 14 versions

### Representative Image

S Verma, CC Wang, J Li, JS Tripoli, TL Inc - [freepatentsonline.com](http://freepatentsonline.com)

... it is not possible to distinguish between a dirty page write remaining from a previous transaction and a change made by ... If a transaction opens a file for read/write, then TxF requires one structure for the file, one per stream ... 9. The data structures for this open are represented in FIG ...

Cached - All 2 versions

## The Rio file cache: Surviving operating system crashes

psu.edu [PDF]

PM Chen, WT Ng, S Chandra, C Aycock, G ... - Proceedings of the ..., 1996 - portal.acm.org  
... When the system is rebooted, it must **read** the file cache contents that were present in physical ...  
faults that leave the system running will propagate **data** to disk and hence not **change** the relative ...  
Rio is 4-22 times as fast as systems that guarantee **data** permanence after each file ...  
[Cited by 168](#) - [Related articles](#) - [BL Direct](#) - [All 57 versions](#)

### [\[PS\] Language Research Interests](#)

[nyu.edu](#) [PS]

D Shasha - cs.nyu.edu

... Must be held on **durable** media (eg disks). ... Low utilization reduces likelihood of overflows when  
there are many updates that may **change** the size of a record (eg string fields that have NULL  
values when first inserted). ... to mirror a frequently **read** file – or to partition a large file. ...

[Related articles](#) - [View as HTML](#) - [All 4 versions](#)

### [Straightforward Java persistence through checkpointing](#)

[psu.edu](#) [PDF]

J Howell - ... of the Eighth International Workshop on Persistent ..., 1999 - books.google.com  
... If we could avoid writing out the program text and the **read-only** text of shared libraries, the initial ...  
See Figure 4 (a). An advantage of this approach is a **durable** im- plementation that does not ... is  
that the implementation of such a system must be modified to track each **change** to the ...  
[Cited by 22](#) - [Related articles](#) - [All 33 versions](#)

### [\[PDF\] Core Technologies for Native XML Database Management Systems](#)

[psu.edu](#) [PDF]

XML Native - Citeseer

... WebDAV is built on top of HTTP [28], which is also used for **read** access to documents. ... Page 20. ...  
ingredient for many other situations where **data** must leave the current application's address space,  
apart from mere **data** exchange: For all kinds of **persistent** application **data** that is ...  
[Related articles](#) - [View as HTML](#) - [All 4 versions](#)

### [Extending ACID semantics to the file system](#)

[psu.edu](#) [PDF]

CP Wright, R Spillane, G Sivathanu, E ... - ... Transactions on Storage ..., 2007 - portal.acm.org  
... Otherwise, Sendmail would abort the **transaction** and the file- system state would not **change**. ...  
If a programmer informs Amino when transactions begin and end, **durable** performance is 173%  
better ... in the directory is located close to one another, fewer pages must be **read** in from ...  
[Cited by 15](#) - [Related articles](#) - [All 29 versions](#)

### [\[PDF\] Distributed computing with BEA WebLogic server](#)

[psu.edu](#) [PDF]

D Jacobs - Proceedings of the Conference on Innovative Data ..., 2003 - Citeseer  
... The persistence tier provides **durable** storage in the form of databases and file systems. ... in memory  
after it is loaded, dur- ing which it can be freely used to satisfy **read** requests in ... Even if the target  
server immediately notices the ownership **change**, there is little it can do about the ...  
[Cited by 28](#) - [Related articles](#) - [View as HTML](#) - [All 6 versions](#)

### [Scalable Database Management Software on a Cluster of Nodes Using a Shared-Distributed Flash Memory](#)

D Dinker, AD Eckhardt, DM Ouye, BW O' ... - US Patent App. 12/ ..., 2008 - Google Patents  
... GETO PUT() 128 LOCK() UNLOCK() START() ABORT() I SEND() RECEIVE() NETWORK

[mit.edu](#) [PDF]

... addresses. This scheme offers good performance given a fixed set of servers, because the system can read or write each data block by contacting just one server. However, the scheme makes these cluster storage systems inflexible during change. ...

[psu.edu](#) [PDF]

... 17 Mirrored Write Operation.....17 Mirrored Read Operation.....18 ... that has to be made  **durable** to a ... be possible to retrieve the  **data** in a ...

[mit.edu](#) [PDF]

... high-quality **transaction** system. This result shows that the LIBXAC prototype can support durable memory-mapped transactions on a single process efficiently in an actual application. ... read in the value. For a larger program with more complicated **data** structures and ...

psu.edu [PDF]

... such as databases that require substantial amounts of high-speed, durable storage. ... In particular, we note that magnetic disk obtains between 0.9x and 2.3x the sequential read perfor- ... Table 3.1 gives a sense of how the performance of existing systems might change ...

psu.edu [PDF]

... the time to recover a database in memory and the higher **durable-commit** update ... In an SMP environment, these operations incur excessive coherence L2 cache misses in reading or writing ... the inherent parallelism of differential logging as two serial transactions **change a data** ...

tu-dresden.de [PDF]

... problem is shared memory, where in some cases the speculation was permitted (read only shared ... It relies on making writes on RAM **durable** without necessity of disk access and permitting ... Conquest [WRP] is another file system that aims to **change** from disk to **persistent** RAM ...

<http://scholar.google.com/scholar?rls=GGLD,GGLD:2004-30,GGLD:en&c=dura...g%20buffer%20persistent%20data%20store&um=1&ie=UTF-8&sa=N&hl=en&tab=ws> (9 of 17) 5/12/2010 2:59:40 PM

### Better I/O through byte-addressable, persistent memory

[psu.edu](#) [PDF]

J Condit, EB Nightingale, C Frost, E Ipek, B ... - Proceedings of the ..., 2009 - portal.acm.org  
... Since the latency of a read or a write is dominated by the access to the device, the ... consistency of the file system image in BPRAM, and it allows data to be made durable as soon as ... considered valid when it contains a non-zero inumber, this final write commits the change to the ...

[Cited by 3](#) - [Related articles](#) - [All 19 versions](#)

### REPLICATION OF OPERATIONS ON OBJECTS DISTRIBUTED IN A STORAGE SYSTEM

SL Broeder, GJ Bowring, JJ Collison, V Olsen, DW ... - 2010 - freepatentsonline.com  
... audit trail prior to a DDL or utility operation on a particular source node are applied and durable before a ... In this way files that the extractor has finished reading are free to be recycled by TMF. ... Furthermore, any time transactions change in the updater, a flush is forced of all buffers ...

[Cached](#)

### [PDF] Modelling Recovery in Database Systems

[psu.edu](#) [PDF]

SJG Scheuerl - School of Mathematical and Computational Sciences, ... - Citeseer  
... The recovery manager ensures that on restart all updates made by committed transactions are durable ... read operations on the log during normal processing to obtain the most recent version ... storage for swapping updated data, with the overhead of performing reads during a ...

[Cited by 2](#) - [Related articles](#) - [View as HTML](#) - [All 6 versions](#)

### Storing and managing data in a distributed hash table

[mit.edu](#) [PDF]

MF Kaashoek, RT Morris, E Sit - 2008 - dspace.mit.edu  
... allowing it to be deployed transparently without requiring that clients change their software ... how to structure a distributed hash table to provide high performance, durable data storage for large ... The resulting implementation of DHash scales linearly in read and write throughput as ...

[Related articles](#)

### [PDF] Storing and Managing Data in a Distributed Hash Table

[mit.edu](#) [PDF]

E Sit - 2008 - pdos.csail.mit.edu  
... allowing it to be deployed transparently without requiring that clients change their software ... how to structure a distributed hash table to provide high performance, durable data storage for large ... The resulting implementation of DHash scales linearly in read and write throughput as ...

[Related articles](#) - [View as HTML](#) - [All 3 versions](#)

### [PDF] Memory-mapped transactions

[psu.edu](#) [PDF]

J Sukha - 2005 - Citeseer  
... high-quality transaction system. This result shows that the Libxac prototype can support durable memory-mapped transactions on a single process efficiently in an actual application. ... read in the value. For a larger program with more complicated data structures and ...

[Cited by 2](#) - [Related articles](#) - [View as HTML](#) - [All 12 versions](#)

### [PDF] Better I/O Through Byte-Addressable, Persistent Memory

[psu.edu](#) [PDF]

[Related articles](#) - [View as HTML](#) - [All 3 versions](#)

[psu.edu](#) [PDF]

... 14-3 Avoiding **Durable Subscriptions** . . . . . In response to changes in message rate and other factors, these algorithms **change batch size and delivery times**. ... "Tune the Chunk Size" on page 2-2 ● "Use Optimistic or Read-only Concurrency" on page 2-3 ...

[Related articles](#) - [View as HTML](#) - [All 65 versions](#)

[usenix.org](http://www.usenix.org) [HTML]

... that focus on file systems and their performance, we do not see any change in this ... of the normal main memory is treated as a protected region, maintained with read-only protection ... it does not guarantee (as FFS does) that all meta-data operations are durable upon completion of ...

Related articles - Cached - All 43 versions

Performing computationally intensive calculations within a database server that provides a recovery mechanism

... Uncommitted transactions should not be durable. Thus, the data modified by the changes made by transaction 136 is in an inconsistent state. ... The undo record stores the specific change information for data blocks updated, deleted or modified by changes in a transaction. ...

## Related articles

psu.edu [PDF]

... Page 11. BEA WebLogic Server Performance and Tuning xi **Change In JMS Server or Destination Status** . . . . 15-3 Avoiding **Durable Subscriptions** . . . . "Tune the Chunk Size" on page 2-3 "Use Optimistic or **Read-only Concurrency**" on page 2-3 "Use Local Interfaces" on page 2-3 ...

[Related articles](#) - [View as HTML](#) - [All 30 versions](#)

[CITATION] Mastering SQL Server 2008

M Lee, G Bieker - 2009 - Wiley-India

All 4 versions

Which kinds of OS mechanisms should be provided for database management?

... as an atomic, consistent, and isolated sequence of actions (operations) with **durable** results is a ... Such an interface allows simple read and write operations of fixed- length blocks ... For example, **change of storage** technology or communication protocols affect the DBMS code. ...

Cited by 3 - Related articles - All 5 versions

[BOOK] Beginning Oracle Database 11g Administration: From Novice to Professional

I Fernandez - 2009 - books.google.com

... 286 Flashback Data Archive .....288 Flashback Database .....288 LogMiner

.....289 Data Recovery Advisor ... Page 17. ... Unfortunately, most of these books are never read, just skipped through and left to gather dust on ...

Related articles - All 4 versions

[PDF] Client/Server Systems, Middleware and EAI (Enterprise Application Integration) A. Buchmann DVS, Fachbereich Informatik

TU Darmstadt - Citeseer

... Enforces business rules and establishes business processes. Resource manager deals with storage, indexing, and retrieval of data necessary to support the application logic. ... Client Business processes Persistent storage Page 5. 5 ... Data distribution or replication ...

View as HTML - All 9 versions

psu.edu [PDF]

[PDF] Is It Possible To Use Oracle TimesTen While Maintaining Real-Time Performance?

googlepages.com [PDF]

MAJ Qureshi, P Taban, S Vasterås - ahmadjaved.com-a.googlepages. ...

... ALE: Alert Detection (It acquires data from both databases TDB and DDB, finds alert on basis of two databases, in case alert is detected ) ... EDF is the most suitable for ATC system Page 18. ...

[5, pg 83] Conflicts can occur in transaction during read/write to TDB. ...

Related articles - View as HTML

[HTML] Rethink the sync

usenix.org [HTML]

EB Nightingale, K Veeraraghavan, PM Chen, ... - Proceedings of the 7th ..., 2006 - usenix.org

... This change guarantees ordering; specifically, the property that if an operation A causally precedes ... faster than disabling the drive cache since the drive cache improves read times and ... ext3, xsyncfs guarantees that the data associated with each POST request is durable before a ...

Cited by 42 - Related articles - Cached - All 54 versions

On the use of NAND flash memory in high-performance relational databases

mit.edu [PDF]

SR Madden, DDS Myers - 2008 - dspace.mit.edu

... such as databases that require substantial amounts of high-speed, durable storage. ... In particular, we note that magnetic disk obtains between 0.9x and 2.3x the sequential read perfor- ... Table 3.1 gives a sense of how the performance of existing systems might change ...

Related articles

Affinity-based management of main memory database clusters

M Ji - ACM Transactions on Internet Technology (TOIT), 2002 - portal.acm.org

... as a single operation on that machine, ie, application of the change log from the ... be leveraged to guarantee the atomic, consistent, isolated, and durable (ACID) properties ... one of the five categories: local (reading replicated columns only), read (reading nonreplicated columns ...

Cited by 11 - Related articles - All 2 versions

### Maintaining and checking parity in highly available Scalable Distributed Data Structures

D Cieslicki, S Schaeckeler, T Schwarz - Journal of Systems and Software, 2009 - Elsevier

... All fields Author Search tips (Opens new window) Journal/book title. Volume Issue Page Clear

all ... Current control centers **store this data** on a pair of mirrored disks, but could use SDDS ... allows a much higher number of reads and can therefore accommodate **read** access from ...

### [PS] Transaction Management in CoOMS

A Geppert, S Scherrer, KR Dittrich, F ... - 1993 - ifi.uzh.ch

... **transaction** forests and among siblings, subtransactions “inherit” the rights to perform **read** or write ... Thus, in essence each par-ent decides whether its subtransactions are **durable**, and in ... Additionally, this (data model) layer contains a scheduler that synchronizes DML-operations ...

Cited by 3 - Related articles - View as HTML - All 3 versions

uzh.ch [PS]

### Using Abstract State Machines to Model ARIES-based Transaction Processing

M Kirchberg - Journal of Universal Computer Science, 2009 - jucs.org

... which never **change** during any run of M, and dynamic functions, which may change as a ... According to this scheduling rule, only those **read** and write operations are passed on to the ... must only be released after the effects of a **transaction's** operations have been made **durable**. ...

Cited by 1 - Related articles - All 6 versions

jukm.org [PDF]

### Communication-link-attached persistent memory system

S Fineberg, P Mehra, R Hansen - US Patent App. 10/808,138, 2004 - Google Patents

... In this manner, **read** or write commands are carried on RDMA-enabled SAN 106 to the nPMU's ...

In a write operation initiated by processor node 102, for example, once **data** have been ... 29, 2005 successfully stored in the nPMU, they are **durable** and will survive a power outage or ...

All 2 versions

### [PDF] Dat abases

S Oza - 1997 - nlc-bnc.ca

... ceptually in cornputers. Two operations are possible on the **data**: **read** and mite. The **change** in the system's state is noted by writing contents of the database. An ... It is designed to handle large volume of stored **data** efficiently. -4 DBMS and a database together ...

View as HTML - All 2 versions

nlc-bnc.ca [PDF]

### [PDF] The Hadoop Distributed File System

K Shvachko, H Kuang, S Radia, R Chansler - storageconference.org

... DataNodes in HDFS do not use **data** protection mechanisms such as RAID to make the **data durable**. ... System evolution may lead to a **change** in the format of the NameNode's checkpoint and ... However, many efforts have been put to improve its **read/write** response time in order ...

View as HTML

storageconference.org [PDF]

### [PDF] Coordinating access to computation and data in distributed systems

DL Thain - 2004 - Citeseer

... distinct entities: one service did not know about the other. Accesses to the file server by programs

psu.edu [PDF]



succeeded or failed solely on their own terms. A failure to read or write **data** would **Page 27**. 17  
be exposed to the program and had no direct bearing on access to the CPU. ...

[Cited by 1](#) - [Related articles](#) - [View as HTML](#) - [All 11 versions](#)

### [\[PDF\] Building a Database in the Cloud](#)

[ethz.ch](#) [PDF]

M Brantner, D Florescu, DA Graf, D Kossmann, T ... - dbis.ethz.ch

... **Read**(key as uuid, uri as string): Reads the payload **data** of a record given the key of the record  
and the URI of the collection. ... The only way to change a key of 14 ... We use the term transaction  
for a sequence of read, update, and create requests between two commit or abort calls. ...

[Cited by 3](#) - [Related articles](#) - [View as HTML](#)

### [\[HTML\] UsenetDHT: A low-overhead design for Usenet](#)

[usenix.org](#) [HTML]

MIT CSAIL - [usenix.org](#)

... its predecessor or successor to generate repairs every ten minutes or when these servers change. ...  
of costs from repetitive article transmission and replication of un-read articles in ... [16] Haeberlen,  
A., Mislove, A., and Druschel, P. Glacier: Highly durable, decentralized storage ...

[Related articles](#) - [Cached](#) - [All 11 versions](#)

### [\[HTML\] MIT CSAIL](#)

[usenix.org](#) [HTML]

E Sit, R Morris, MF Kaashoek - [usenix.org](#)

... its predecessor or successor to generate repairs every ten minutes or when these servers change. ...  
of costs from repetitive article transmission and replication of un-read articles in ... [16] Haeberlen,  
A., Mislove, A., and Druschel, P. Glacier: Highly durable, decentralized storage ...

[Related articles](#) - [Cached](#) - [All 2 versions](#)

### [Operating systems transactions](#)

[psu.edu](#) [PDF]

DE Porter, OS Hofmann, CJ Rossbach, A ... - Proceedings of the ..., 2009 - [portal.acm.org](#)

... the system can always roll back to a pre-transaction state) and durable (trans- action results ... The  
presence of system transactions does not change the behav- ior of non-transactional ... 3.2 TxOS  
overview TxOS implements system transactions by isolating data read and written in a ...

[Cited by 5](#) - [Related articles](#) - [All 15 versions](#)

### [\[BOOK\] Transactional information systems: theory, algorithms, and the practice of concurrency control and recovery](#)

[sigmod.org](#) [PDF]

G Weikum, G Vossen - 2002 - [books.google.com](#)

... Protocol 205 5.5.3 The MVSGT Protocol 209 5.5.4 A Multiversion Protocol for Read-Only  
Transactions ... Large Objects 562 15.2.1 Logical Log Entries for the Redo of Index Page Splits  
562 ... 2 Database Restore Algorithms 599 16.2.3 Analysis of the Mean Time to Data Loss 602 ...

[Cited by 247](#) - [Related articles](#) - [All 12 versions](#)

### [Network distributed tracking wire transfer protocol](#)

JK Overton, SW Bailey - US Patent App. 11/354,224, 2006 - Google Patents

... **Page 14**. US 2007/0011267 A1 Jan. ... Relationships between identification strings and location  
strings can be dynamically and spontaneously manipulated thus allowing the corresponding  
data relation- ships also to change dynamically, spontaneously, and effi- ciently. ...

[Related articles](#) - [All 6 versions](#)

[\[PDF\] Theory and Practice of Failure Transparency](#)

[psu.edu](#) [PDF]

DE Lowell - 1999 - Citeseer

... even in this limited domain they accept the loss of the last few seconds of new file data). In partic- ...  
model in describing the problem of failures, and the challenges of recovering from them. Page  
22. 10 ... cesses as finite state machines that **change** state in response to inputs. ...

[Cited by 3](#) - [Related articles](#) - [View as HTML](#) - [All 12 versions](#)

[\[BOOK\] Building Client-Server Applications with Visual FoxPro and SQL Server 7.0](#)

C Urwiler, G DeWitt, M Levy, L Koorhan, C Caron - 2000 - books.google.com

... Inside of a dog, it's too dark to read." Whil Hentzen Hentzenwerke Publishing August, 2000 ... Source  
Code & .CHM Files." (The text for this link may **change** over time ... SQL Server transactions 196  
Implicit transactions 196 SQL Server isolation levels 198 **Durable** transactions 200 ...

[All 2 versions](#)

[\[HTML\] Recent Filesystem Optimisations in FreeBSD](#)

[usenix.org](#) [HTML]

I Dowse, D Malone - usenix.org

... Consequently, some operations which have traditionally been **durable** on system call return are  
no longer so. ... indexes have the disadvantage that once you commit to one, you cannot **change**  
its format. ... A **transaction** can either be a file create, delete, read or append operation. ...

[Cited by 21](#) - [Related articles](#) - [Cached](#) - [All 23 versions](#)

[Secure kernel transactions](#)

J Cargille, S Verma, MJ Zbikowski, WR ... - US Patent 7,591,015, 2009 - Google Patents

... an outcome for a **transaction** has been determined, the result is guaranteed never to **change**  
(durability ... Thus alerted, RM prepares 310 by rendering resource **data** in a **durable** state so that ...  
then records the outcome in an associated log, and the underlying resource **data** is either ...

[Related articles](#) - [All 3 versions](#)

[\[PDF\] Workshop on Transactional Memory Workloads](#)

[uiuc.edu](#) [PDF]

C Sponsorship - freya.cs.uiuc.edu

... No understanding of the exact implementation of the task or the **data** structures is needed. ... This  
case is rare as the read- modify-write operation is fast and has a low penalty (it ... transactions is  
that the programmer must be very careful when using them as they **change** the atomicity ...

[Related articles](#) - [View as HTML](#) - [All 2 versions](#)

[\[BOOK\] MySQL: the complete reference](#)

V Vaswani - 2004 - books.google.com

... you might prefer to see this book as a desktop reference, flipping it open on an as-needed basis  
to read about specific ... Real-world examples include an interactive command-line SQL client and  
an interactive expense tracker that supports **data** entry and simple report ... Page 21. ...

[Cited by 18](#) - [Related articles](#) - [All 4 versions](#)

**[PDF] Providing Fault Tolerance for Transactional Web Services**

[psu.edu](#) [PDF]

I Vasquez, JA Miller, K Verma - Citeseer

... ReadOnly Notifies the coordinator about a participant operation that did not change the state of ... tracing pre- and post- images of the data, only the operations performed against it are ... on behalf of a transaction (including those resulting in a negative vote, read-only operations ...

[Related articles](#) - [View as HTML](#) - [All 9 versions](#)

**[PDF] Efficient Commit Processing in High-Availability Main-Memory Databases**

[ntnu.no](#) [PDF]

H Kolltveit - 2008 - idi.ntnu.no

... This gives a load of almost 3900 read transactions per second. ... In addition, to maintain consistency, the system must maintain a backup of the data of the crashed process. ... worse, since a backup replica of the client would take over the processing, and this change is transparent ...

[Related articles](#) - [View as HTML](#) - [All 4 versions](#)

**[PDF] Building an extensible operating system**

[psu.edu](#) [PDF]

CA Small - 1998 - Citeseer

... to applications, as if they were standard files, but the auto- compression implementations of read and write ... to communi- cate with the receiving domain, it is necessary to move data from the ... informed that a different process is in context, which can entail switching page tables and ...

[Cited by 8](#) - [Related articles](#) - [View as HTML](#) - [All 5 versions](#)

**[PDF] Cluster storage for commodity computation**

[psu.edu](#) [PDF]

RG Ross - Proceedings of the 1st USENIX Workshop on - Citeseer

... As usage patterns change, the partition boundaries are updated dynamically, with urgent changes made quickly and more ... 159 7.1.3 Read-only territory grants ... simulations, and graphics rendering farms are all characterised by repetitive computa- tions over huge data sets, and ...

[Cited by 2](#) - [Related articles](#) - [View as HTML](#) - [All 7 versions](#)

**Optimistic replication**

[psu.edu](#) [PDF]

Y Saito, M Shapiro - ACM Computing Surveys (CSUR), 2005 - portal.acm.org

... mirroring [Nakagawa 1996; Krasel 2000] let a replica be added with no change to ex ... try to increase the system's throughput by, for example, letting transactions read values produced by ... Isolated (interme- diate state is not observable by other transactions), and Durable (the final ...

[Cited by 340](#) - [Related articles](#) - [All 39 versions](#)

**[PDF] Speculative execution within a commodity operating system**

[psu.edu](#) [PDF]

EB Nightingale - 2007 - Citeseer

... For example, writing data to disk could be internal as long as a commit never occurs (ie, the durable changes can be ... is marked as speculative and the data associated with the action is buffered within the kernel. ... ments where resource usage may change drastically? ...

[Related articles](#) - [View as HTML](#) - [All 10 versions](#)

1 2

## Next

## Search

<http://scholar.google.com/scholar?rls=GGLD,GGLD:2004-30,GGLD:en&q=dura...g%20buffer%20persistent%20data%20store&um=1&ie=UTF-8&sa=N&hl=en&tab=ws> (17 of 17)5/12/2010 2:59:40 PM

[Web](#) [Images](#) [Videos](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) ▼
[Sign in](#)

Google scholar

durable read change data page flush transaction

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)

Scholar



Articles and patents



- 2004

include citations

Results 1 - 62 of 62. (0.28 sec)

eNVy: a non-volatile, main memory storage system[postech.ac.kr](#) [PDF]

M Wu, W Zwaenepoel - ... of the sixth international conference on ..., 1994 - portal.acm.org  
 ... nology matures, Flash has the potential to become very **durable**. A Flash chip normally operates in an EPROM-like **read only mode**. All other functions are initiated by ... ally involves a series of program and verify steps until the desired **data** is actually changed on the chip. ...

Cited by 232 - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)[HTML] Berkeley db[usenix.org](#) [HTML]

MA Olson, K Bostic, M Seltzer - ... of the FREENIX Track: 1999 USENIX ..., 1999 - usenix.org  
 ... **Read-only** applications can use Berkeley DB's memory-mapped file service to improve performance on most architectures. Configurable **page size**. ... They must be **durable**. ... When it finishes, the database will contain every **change** made by every **transaction** that ever committed. ...

Cited by 187 - [Related articles](#) - [Cached](#) - [All 16 versions](#)Integrating temporal, real-time, an active databases[psu.edu](#) [PDF]

K Ramamritham, R Sivasankaran, JA Stankovic, ... - ACM Sigmod ..., 1996 - portal.acm.org  
 ... purposes, some of the sensor readings and actuator control settings may be archived, that is, **made durable**. ... to NV-RAM if the validity is long enough for a NV-RAM write and **read**. ... Temperatures typical **change** slowly, but the values are used for many other critical calculations. ...

Cited by 51 - [Related articles](#) - [BL Direct](#) - [All 5 versions](#)Natix: A technology overview[psu.edu](#) [PDF]

T Fiebig, S Helmer, CC Kanne, G Moerkotte, J ... - Web, Web-Services, ..., 2002 - Springer  
 ... Each record is identified by a slot number which does not **change** even if the ... pro- cessing depends on primitives based on the proven foundation of atomic, **durable** and serializable ... The **log manager** provides the routines to write and **read log** records, synchronizing access of ...

Cited by 19 - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)[PDF] The recovery manager of a data management system[psu.edu](#) [PDF]

JN Gray, P McJones, M Blasgen, RA Lorie, TG ... - IBM Research Report ..., 1979 - Citeseer  
 ... is complicated to program and has the problem that the flight status may **change** during the ... application programs using the RDS can construct groups of RSS actions which are atomic and

**durable**. ... To see why this is necessary, suppose a **read** lock on a record were released by ...

[Cited by 33](#) - [Related articles](#) - [View as HTML](#) - [All 5 versions](#)

### Method and apparatus for insuring database **data** integrity without **data** recovery logging

RW Lyle, JZ Teng, JA Yothers - US Patent 6,651,073, 2003 - Google Patents

... In order to make such a database system **persistent** or "**durable**", the **data** pages must be ... Unlike non-distributed databases where a single **change** is, or is not, made locally, all ... single thread process on the entire table and, consequently, it prevents concurrent **read/write** access ...

[Cited by 3](#) - [Related articles](#) - [All 2 versions](#)

### Anatomy of a native XML base management system

[psu.edu](#) [PDF]

T Fiebig, S Helmer, CC Kanne, G Moerkotte, J ... - The VLDB Journal, 2002 - Springer

... Special calls exist to avoid I/O for **reading** or writing newly allocated or deallocated pages ... a regular slotted **page** implementation, which maintains a collection of variable- length records on a **data page**. Each record is identified by a slot number which does not **change** even if the ...

[Cited by 177](#) - [Related articles](#) - [All 23 versions](#)

### [BOOK] Transaction processing: concepts and techniques

[microsoft.com](#) [PPT]

J Gray, A Reuter - 1993 - books.google.com

... LAN RPC random **read** memory record 1,000 - " local RFC sequential write record mcmofl process dispatch sequential **read** record 100 ... of the TP Monitor 312 6.3.1 The Central **Data** Structures of the TPOS 313 **Data** Structures Owned ... ii Contents 6.4.2 **Durable** Request Queues ...

[Cited by 3488](#) - [Related articles](#) - [Library Search](#) - [All 6 versions](#)

### [HTML] Journaling versus soft updates: Asynchronous meta-**data** protection in file systems

[usenix.org](#) [HTML]

MI Seltzer, GR Ganger, MK McKusick, KA ... - USENIX Annual ..., 2000 - usenix.org

... that focus on file systems and their performance, we do not see any **change** in this ... of the normal main memory is treated as a protected region, maintained with **read-only** protection ... it does not guarantee (as FFS does) that all meta-**data** operations are **durable** upon completion of ...

[Cited by 165](#) - [Related articles](#) - [Cached](#) - [All 24 versions](#)

### [CITATION] Implementing atomicity in two systems: techniques, tradeoffs, and experience

LF Cabrera, JA McPherson, PM Schwarz, JC Wyllie - IEEE Transactions on Software ..., 1993

[Cited by 19](#) - [Related articles](#) - [BL Direct](#) - [All 8 versions](#)

### Method and apparatus for efficiently recovering from a failure in a database that includes unlogged objects

RW Lyle, JZ Teng, JA Yothers - US Patent 6,567,928, 2003 - Google Patents

... In order to make such a database system **persistent** or "**durable**", the **data** pages must ... Unlike non-distributed databases where a single **change** is, or is not, made locally, all ... US 6,567,928 BI table and, consequently, it prevents concurrent **read/write** access by other applications ...

[Cited by 6](#) - [Related articles](#) - [All 2 versions](#)

### Checkpoint methods and systems utilizing non-disk **persistent** memory

GS Smith, SA Fineberg, P Mehra, R ... - US Patent App. 10/ ..., 2004 - Google Patents

... In this manner read or write commands are carried on RDMA-enabled SAN 306 to the CPMU's network interface (NI) 308. ... In a write operation initiated by pro- cessor node 302, for example, once **data** have been success- fully stored in the CPMU, they are **durable** and will ...

[All 2 versions](#)

### The design and implementation of a multilevel secure **log** manager

VR Pesati, TE Keefe, S Pal - sp, 1997 - computer.org

... However, it is possible with a minor **change** in the way paths are selected. ... It returns the **durable** LLSN which is on WADS for that level. The **log**-open-cursor interface provides a way of open- ing a cursor for **reading log** records. ...

[Cited by 8](#) - [Related articles](#) - [BL Direct](#) - [All 6 versions](#)

### [PDF] File system extensibility and reliability using an in-kernel database

[psu.edu](#) [PDF]

A Kashyap - Master's Thesis, State University of New York, Stony ..., 2004 - Citeseer

... A simple **change** such as adding an extra inode attribute for inode creation time would be difficult ...

The database files can exist on any file system that provides standard **read**-write capabilities. ...

Using the O SYNC option with open(2) provides **durable** writes, while also having the ...

[Cited by 10](#) - [Related articles](#) - [View as HTML](#) - [All 22 versions](#)

### [PDF] A Snapshot Utility for a Distributed Object-Oriented Database System

[mit.edu](#) [PDF]

CH Moh - 2002 - pmg.lcs.mit.edu

... The Anti-MOB saves the state of **data** objects before they are modified so that the OR can later undo the modifications from a **page** on the disk to ... The MOB improves performance of the system by al- lowing installation **read** to be performed in a background flusher thread. ...

[Related articles](#) - [View as HTML](#) - [All 4 versions](#)

### [PDF] Sorting and Indexing with Partitioned B-trees

[psu.edu](#) [PDF]

G Graefe - Proc. of the 1st Int'l Conference on Innovative Data ..., 2003 - Citeseer

... traditional implementation of partitioning, each creation or removal of a partition is a **change** of the ... contain 1,000 records), and merge those at a cost of 9,000 records **read**, merged, and ... The initial **data** transfer (prior to committing the initial index) may omit **data log**- ging, similar ...

[Cited by 38](#) - [Related articles](#) - [View as HTML](#) - [All 4 versions](#)

### The impacts of write-through procedures and checkpointing on real-time concurrency control

[psu.edu](#) [PDF]

TW Kuo, YH Hou, KY Lam - The Computer Journal, 2003 - Br Computer Soc

... Logical logging can **change** a long physical **log** into a record of only a few words [12]. ... Before a **transaction** reads (or writes) a **data** object, it must first **read**-lock (or write- lock) the ... the former **data** object is not later than the corresponding unlocking operation of the latter **data** object ...

[Cited by 3](#) - [Related articles](#) - [BL Direct](#) - [All 11 versions](#)

### Method and apparatus for incremental undo

B Nainani, GC Ngai, W Huang, JD Klein, RJ ... - US Patent ..., 2001 - Google Patents

... Uncommitted transac- tions should not be **durable**. ... chip or cartridge, a carrier wave as described hereinafter, or any other medium from which a computer can **read**. ... then undo information from the rollback entry is retrieved from the undo record and a **change** is generated for the ...

[Cited by 9](#) - [Related articles](#) - [All 2 versions](#)

### [PDF] Write optimized object-oriented database systems

[psu.edu](#) [PDF]

K Nørvåg, K Bratbergsengen - Conf. of the Chilean Computer Science ..., 1997 - Citeseer

... When a **transaction** is committed, the **data** should really be **durable**. ... Traditional clus- tering works well as long as the access pattern is static, but if this happens to **change**, or access pattern is ... This block holds static volume information, and is only **read** when the system is started. ...

[Cited by 4](#) - [Related articles](#) - [View as HTML](#) - [All 7 versions](#)

### [CITATION] Write optimized object-oriented database systems

K Norvag, K Bratbergsengen - Computer Science Society, 1997. Proceedings., XVII ..., 1997

[Cited by 1](#) - [Related articles](#) - [All 3 versions](#)

### [PDF] Library Express-Interlibrary Loan Request

[wisc.edu](#) [PDF]

R ARPACI-DUSSEAU - ACM Computing Surveys, 1981 - pages.cs.wisc.edu

... To avoid service interruption, notify your local Post Office before **change** of residence: for a fee ...

System R recovery manager sup- ports these commands and guarantees an atomic, **durable** execution. ... crash or disk dropped on the floor) or by software failure (bad **data** written on a ...

[Related articles](#) - [All 4 versions](#)

### Recovery guarantees for internet applications

[psu.edu](#) [PDF]

R Barga, D Lomet, G Shegalov, G ... - ACM Transactions on ..., 2004 - portal.acm.org

... Since the sender must make its state **durable**, there is low cost of also taking responsibility for ensuring that the message is ... However sometimes, physical logging is inevitable, for example, when **reading** the real-time clock. ... Ids for processes, threads, or users may also **change**. ...

[Cited by 35](#) - [Related articles](#) - [All 14 versions](#)

### The Rio file cache: Surviving operating system crashes

[psu.edu](#) [PDF]

PM Chen, WT Ng, S Chandra, C Aycock, G ... - Proceedings of the ..., 1996 - portal.acm.org

... When the system is rebooted, it must **read** the file cache contents that were present in physical ... faults that leave the system running will propagate **data** to disk and hence not **change** the relative ... Rio is 4-22 times as fast as systems that guarantee **data** permanence after each file ...

[Cited by 168](#) - [Related articles](#) - [BL Direct](#) - [All 57 versions](#)

### Straightforward Java persistence through checkpointing

[psu.edu](#) [PDF]

J Howell - ... of the Eighth International Workshop on **Persistent** ..., 1999 - books.google.com



... If we could avoid writing out the program text and the **read-only** text of shared libraries, the initial ...  
See Figure 4 (a). An advantage of this approach is a **durable** implementation that does not ... is  
that the implementation of such a system must be modified to track each **change** to the ...

[Cited by 22](#) - [Related articles](#) - [All 33 versions](#)

#### [\[PDF\] Distributed computing with BEA WebLogic server](#)

[psu.edu](#) [PDF]

D Jacobs - Proceedings of the Conference on Innovative Data ..., 2003 - Citeseer

... The persistence tier provides **durable storage** in the form of databases and file systems. ... in memory  
after it is loaded, during which it can be freely used to satisfy **read** requests in ... Even if the target  
server immediately notices the ownership **change**, there is little it can do about the ...

[Cited by 28](#) - [Related articles](#) - [View as HTML](#) - [All 6 versions](#)

#### [\[PDF\] Object-Oriented Stable Storage](#)

[psu.edu](#) [PDF]

X Caron - 2000 - Citeseer

... 17 Mirrored Write Operation.....17 Mirrored **Read** Operation.....18 ... that has to  
be made **durable** to a ... be possible to retrieve the **data** in a ...

[View as HTML](#) - [All 7 versions](#)

#### [P\\* TIME: highly scalable OLTP DBMS for managing update-intensive stream workload](#)

[psu.edu](#) [PDF]

SK Cha, C Song - ... conference on Very large data bases-Volume 30, 2004 - portal.acm.org

... the time to recover a database in memory and the higher **durable-commit** update ... In an SMP  
environment, these operations incur excessive coherence L2 cache misses in **reading** or writing ...  
the inherent parallelism of differential logging as two serial transactions **change** a **data** ...

[Cited by 9](#) - [Related articles](#) - [BL Direct](#) - [All 8 versions](#)

#### [\[HTML\] JOURNALINGVERSUSSOFTWARE: ASYNCHRONOUSMETA-DATA PROTECTION IN FILESYSTEMS](#)

[usenix.org](#) [HTML]

MI Seltzer, GR Ganger, MK McKusick, KA Smith, CAN ... - 2000 - usenix.org

... that focus on file systems and their performance, we do not see any **change** in this ... of the normal  
main memory is treated as a protected region, maintained with **read-only** protection ... it does not  
guarantee (as FFS does) that all meta-**data** operations are **durable** upon completion of ...

[Related articles](#) - [Cached](#) - [All 43 versions](#)

#### [\[PDF\] BEA WebLogic Server](#)

[psu.edu](#) [PDF]

WL Server - 2002 - Citeseer

... **Page 11.** BEA WebLogic Server Performance and Tuning xi **Change** In JMS Server or Destination  
Status . . . . . 15-3 Avoiding **Durable** Subscriptions . . . . . "Tune the Chunk Size" on **page 2-3** "Use  
Optimistic or **Read-only** Concurrency" on **page 2-3** "Use Local Interfaces" on **page 2-3** ...

[Related articles](#) - [View as HTML](#) - [All 30 versions](#)

#### [Which kinds of OS mechanisms should be provided for database management?](#)

P Christmann, T Härder, K Meyer-Wegener, A ... - ... with Distributed Systems, 1987 - Springer

... as an atomic, consistent, and isolated sequence of actions (operations) with **durable** results is

a ... Such an interface allows simple **read** and write operations of fixed- length blocks ... For example, **change of storage** technology or communication protocols affect the DBMS code. ...

[Cited by 3](#) - [Related articles](#) - [All 5 versions](#)

### Affinity-based management of main memory database clusters

M Ji - ACM Transactions on Internet Technology (TOIT), 2002 - portal.acm.org

... as a single operation on that machine, ie, application of the **change log** from the ... be leveraged to guar- antee the atomic, consistent, isolated, and **durable** (ACID) properties ... one of the five categories: local (**reading** replicated columns only), **read** (**reading** nonreplicated columns ...

[Cited by 11](#) - [Related articles](#) - [All 2 versions](#)

### [PS] Transaction Management in CoOMS

[uzh.ch](#) [PS]

A Geppert, S Scherrer, KR Dittrich, F ... - 1993 - ifi.uzh.ch

... **transaction** forests and among siblings, subtransactions "inherit" the rights to perform **read** or write ... Thus, in essence each par- ent decides whether its subtransactions are **durable**, and in ... Additionally, this (**data** model) layer contains a scheduler that synchronizes DML-operations ...

[Cited by 3](#) - [Related articles](#) - [View as HTML](#) - [All 3 versions](#)

### Communication-link-attached **persistent** memory system

S Fineberg, P Mehra, R Hansen - US Patent App. 10/808,138, 2004 - Google Patents

... In this manner, **read** or write commands are carried on RDMA-enabled SAN 106 to the nPMU's ... In a write operation initiated by processor node 102, for example, once **data** have been ... 29, 2005 successfully stored in the nPMU, they are **durable** and will survive a power outage or ...

[All 2 versions](#)

### [PDF] Dat abases

[nlc-bnc.ca](#) [PDF]

S Oza - 1997 - nlc-bnc.ca

... ceptually in computers. Two operations are possible on the **data**: **read** and mite. The **change** in the system's state is noted by writing contents of the database. An ... It is designed to handle large volume of stored **data** efficiently. -4 DBMS and a database together ...

[View as HTML](#) - [All 2 versions](#)

### [PDF] Coordinating access to computation and **data** in distributed systems

[psu.edu](#) [PDF]

DL Thain - 2004 - Citeseer

... distinct entities: one service did not know about the other. Accesses to the file server by programs succeeded or failed solely on their own terms. A failure to **read** or write **data** would Page 27. 17 be exposed to the program and had no direct bearing on access to the CPU. ...

[Cited by 1](#) - [Related articles](#) - [View as HTML](#) - [All 11 versions](#)

### [BOOK] Transactional information systems: theory, algorithms, and the practice of concurrency control and recovery

[sigmod.org](#) [PDF]

G Weikum, G Vossen - 2002 - books.google.com

... Protocol 205 5.5.3 The MVSGT Protocol 209 5.5.4 A Multiversion Protocol for Read-Only Transactions ... Large Objects 562 15.2.1 Logical Log Entries for the Redo of Index Page Splits 562 ... 2 Database Restore Algorithms 599 16.2.3 Analysis of the Mean Time to Data Loss 602 ... Cited by 247 - Related articles - All 12 versions

**[PDF] Theory and Practice of Failure Transparency**

**psu.edu [PDF]**

DE Lowell - 1999 - Citeseer

... even in this limited domain they accept the loss of the last few seconds of new file data). In partic- ... model in describing the problem of failures, and the challenges of recovering from them. Page 22. 10 ... cesses as finite state machines that change state in response to inputs. ...

Cited by 3 - Related articles - View as HTML - All 12 versions

**[BOOK] Building Client-Server Applications with Visual FoxPro and SQL Server 7.0**

C Urwiler, G DeWitt, M Levy, L Koorhan, C Caron - 2000 - books.google.com

... Inside of a dog, it's too dark to read." Whil Hentzen Hentzenwerke Publishing August, 2000 ... Source Code & .CHM Files." (The text for this link may change over time ... SQL Server transactions 196 Implicit transactions 196 SQL Server isolation levels 198 Durable transactions 200 ...

All 2 versions

**[BOOK] MySQL: the complete reference**

V Vaswani - 2004 - books.google.com

... you might prefer to see this book as a desktop reference, flipping it open on an as-needed basis to read about specific ... Real-world examples include an interactive command-line SQL client and an interactive expense tracker that supports data entry and simple report ... Page 21. ...

Cited by 18 - Related articles - All 4 versions

**[PDF] Building an extensible operating system**

**psu.edu [PDF]**

CA Small - 1998 - Citeseer

... to applications, as if they were standard files, but the auto- compression implementations of read and write ... to communi- cate with the receiving domain, it is necessary to move data from the ... informed that a different process is in context, which can entail switching page tables and ...

Cited by 8 - Related articles - View as HTML - All 5 versions

**[PDF] Transaction Support for Design Processes**

**psu.edu [PDF]**

A Geppert, F Datenbanktechnologie - 1992 - Citeseer

... Supervising Change and Consistency In a design process, inconsistency can result from an individual ... Com- mitted subtransactions are durable, while in case of a crash each active subiltransaction is ... to tell the system that the re- spective colleague is allowed to read (and modify ...

View as HTML - All 5 versions

**[PDF] Monitoring Distributed Component-based Systems**

**vxu.se [PDF]**

M Persson - Reports from MSI, 2001 - vxu.se

... originate from the airplane industry where **data** is monitored and stored in a **durable** box, the ... A traceable component has to expose an interface to **change** properties of the tracing mechanism. ... In a layered architecture faults that originates from the **data** layer can be difficult to find ...  
[Cited by 1](#) - [Related articles](#) - [View as HTML](#) - [All 9 versions](#)

### The evolution of Coda

[psu.edu](#) [PDF]

M Satyanarayanan - ACM Transactions on Computer Systems ( ..., 2002 - portal.acm.org  
... Surprisingly, this archi- tectural inheritance has proven to be robust and **durable** over a long evolution, and a shift in focus from high ... 3.2.1 **Read** Protocol. ... Updates to **data** structures in RVM-backed regions of a server's address space are guaranteed to be atomic and permanent. ...  
[Cited by 148](#) - [Related articles](#) - [BL Direct](#) - [All 25 versions](#)

[\[PDF\]](#) Oracle9i Application Server Best Practices, Release 2 (9.0. 3) Part No. B10578-02 Copyright© 2003 Oracle Corporation. All rights reserved. Contributing Author: ...

[psu.edu](#) [PDF]

MP Mensah, D Panda, J Pepper, S Prasad, K Radage, ... - 2003 - Citeseer  
... The information contained in this document is subject to **change** without notice. ...  
3-26 3.4.9 Create a Cache with **Read** Only EJBs..... ... 3-42 3.5.16 Set the Maximum Number of Connection Attempts in **Data** Sources..... ...  
[View as HTML](#) - [All 10 versions](#)

### Method and system for transacted file operations over a network

PJ Madhavarapu, S Pardikar, BS Raman, S ... - US Patent App. 10/ ..., 2003 - Google Patents  
... Typical file operations include creating a new file, **reading** a file, writing a file, copying a file, renaming a file, etc. ... **Page 14.** ... **Buffer** for the file name, which is aligned in the **data buffer** to a DWORD (4 bytes) boundary The name of the file (not NUL terminated) [0032] [0033] TABLES ...  
[Cited by 1](#) - [Related articles](#) - [All 7 versions](#)

### [\[BOOK\] Hibernate: a developer's notebook](#)

[netwits.ca](#) [PDF]

J Elliott - 2004 - books.google.com  
... RepKouer, This book uses RepKover; a **durable** and flexible lay-flat binding ... 1.5.1; you may want to create a symbolic link to make it easier to work with, and to avoid the need to **change** any environ ... If you're new to Ant, it wouldn't be a bad idea to **read** the manual a little bit to get a ...  
[Cited by 17](#) - [Related articles](#) - [Library Search](#) - [All 10 versions](#)

### [\[PDF\] Release 2.0](#)

[psu.edu](#) [PDF]

ABE Panagos - 1993 - Citeseer  
... Objects can be accessed either via byte-range operations such as **read**, write, append, insert bytes ... almost the same to that of an in-memory dereference of a pointer to resident **data**. This is because **persistent** objects can be manipulated directly on the **page** on which they reside ...  
[Related articles](#) - [View as HTML](#)

[redhat.com](#) [PDF]

### [PDF] Configuration Guide

JBEA Platform - 2002 - redhat.com

... A Pub-Sub With **Durable** Topic Example .....216 1.4. ... The basic idea behind open source is very simple: When programmers can **read**, redistribute, and modify the ... Of course, you should **change** local to remote if the bean interface is annotated with @Remote and ...

Related articles - View as HTML - All 53 versions

### [BOOK] Building SANs with Brocade fabric switches

C Beauchamp, J Judd, B Kuo - 2001 - books.google.com

... xvi Contents Features of Fibre Channel Switches 82 Zoning 83 Classes of Service <S4 Fabric Services S3 Redundancy 86 **Buffer** Credits per Port 86 ... **Page** 21. Contents XIX Master the seven phases of the SAN design lifecycle: 1. **Data** Collection 2. **Data** Analysis 3. Architecture

Cited by 7 - Related articles - All 7 versions

### [PDF] State of the Art in Enablers for Applications in Future Mobile Wireless Internet

J Kangasharju, T Lindholm, K Raatikainen, S Tarkoma - 2002 - cs.helsinki.fi

... In a hospital, when the **reading** of a sensor attached to a patient exceeds a given threshold and a new drug has been ... well-defined structure, for example a set of ordered strings, and generic events do not have an expressive structure (**data** type any ... Event order may not **change**. ...

Cited by 1 - Related articles - All 2 versions

helsinki.fi [PDF]

### [BOOK] WebLogic: the definitive guide

J Mountjoy, A Chugh - 2004 - books.google.com

... This book uses RepKover™, a **durable** and flexible lay-flat binding ... We encourage those who don't to **read** other books from the O'Reilly catalogue that cover the entire ... Chapter 5 looks at WebLogic's support for JDBC connection pools and how **data** sources enable you to access ...

Cited by 5 - Related articles - Library Search - All 4 versions

### [PDF] Improving File System Performance With Adaptive Methods

JN Matthews - 1999 - Citeseer

... optimized system by suggesting targeted improvements to existing **data** layout. Together, these optimizations allow disk layout to **change** over time to support efficient **read** access and enable the system to balance the competing demands of **read** and write access. **Page** 26. 11 ...

Related articles - View as HTML - All 4 versions

psu.edu [PDF]

### [PDF] State of the art in enablers for applications in future mobile wireless internet

S Tarkoma, R Balu, J Kangasharju, M Komu, M ... - ... : Helsinki Institute for ..., 2004 - Citeseer

... distributed and replicated world-wide information **storage** that provides **data** consistency, efficient ... This work item addresses the fundamental principle of adaptability — the behavior of an application changes when the circumstances **change**. ... in a hospital, when the **reading** of a ...

Cited by 3 - Related articles - View as HTML - All 5 versions

psu.edu [PDF]

**[PDF] A response to her ton an % &een (s rtc sm of**

[odu.edu \[PDF\]](#)

K Birman - 1993 - [cs.odu.edu](#)

... that databases do use replication, they tend to replicate objects that **change** infrequently ... As I read their paper, Cheriton and Skeen confine themselves to examples of applications that ... our approach, which comes close to the performance of unreliable data transport technologies ...

[Related articles](#) - [View as HTML](#)

**[PDF] AR esponse to Cheriton and Skeen (s Criticism of**

[princeton.edu \[PDF\]](#)

K Birman - 1993 - [cs.princeton.edu](#)

... that databases do use replication, they tend to replicate objects that **change** infrequently ... As I read their paper, Cheriton and Skeen confine themselves to examples of applications that ... our approach, which comes close to the performance of unreliable data transport technologies ...

[Related articles](#) - [View as HTML](#)

**[BOOK] The care of antiques and historical collections**

PE Guldbeck, AB MacLeish - 1996 - [books.google.com](#)

... philosophy of proper museum functions has changed over the years and will continue to **change**. ... of them appears at the end of this chapter, among the selections recommended for further **reading**. ... The **data** offered should serve as a limited introduction to some of the problems ...

[Cited by 3](#) - [Related articles](#) - [Library Search](#) - [All 3 versions](#)

**[BOOK] The economic psychology of everyday life**

P Webley - 2001 - [books.google.com](#)

... market Barrie Gunter Changing European Identities Social psychological analyses of social **change** Glynis M ... from the British Library Library of Congress Cataloging in Publication **Data** The economic ... our seminar courses in the last four years, who have **read** and commented on ...

[Cited by 50](#) - [Related articles](#) - [All 4 versions](#)

**[BOOK] The lumber industry in early modern Japan**

CD Totman - 1995 - [questia.com](#)

... Library of Congress Cataloging-in-Publication **Data**. ... [This **page** intentionally left blank.]. ... 6 Axis defeat in 1945 refocused the fascist-communist rivalry in the form of the cold war, and that **change** drew most English-speaking intellectuals into the antiMarxist camp, although a later ...

[Cited by 9](#) - [Related articles](#) - [Library Search](#) - [All 6 versions](#)

**[BOOK] Design and aesthetics: a reader**

J Palmer, M Dodson - 1996 - [books.google.com](#)

... The gre> market Bttrrie Gunter t'bunging European Identities Social psychological analyses of social **change** Glynis M ... is available from the British Lihrary Lihrary of Congress Cataloging in Publication **Data** The economic ... who have **read** and commented on early drafts of chapters ...

[Cited by 17](#) - [Related articles](#) - [All 2 versions](#)

[BOOK] Doing business in the new Latin America: a guide to cultures, practices, and opportunities

[msu.edu](#) [PDF]

TH Becker - 2004 - books.google.com  
 ... 5.Z5.B43 2004 330.98—dc22 2004054667 British Library Cataloguing in Publication Data is available. ... and ethnic accuracy is a compromise, an offering at the altar of **reading** simplicity. ... Whereas one travels north or south to experience climate **change** in temperate zones, in ...  
[Cited by 4](#) - [Related articles](#) - [All 4 versions](#)

[BOOK] Conquering calculus: the easy road to understanding mathematics

JH Weaver - 1998 - books.google.com  
 ... mathematics. His geometry was viewed with awe and, indeed, was more **durable** than most religions. ... Euclid. But this **change** did not require the complete demolition of Euclid's work. ... pro- **Page 24**. Into the Lion's Den 15 divides. ...  
[Related articles](#) - [All 3 versions](#)

[BOOK] The end of magic

A Glucklich - 1997 - questia.com  
 ... Library of Congress Cataloging-in-Publication Data. ... Another recent widely **read** article is by Paul Alan Cox and Michael J. Balick, "The Ethnobotanical Ap ... he could not scientifically prove it, Wallace had discovered the correct mechanism of evolutionary **change**, and Darwin ...  
[Cited by 28](#) - [Related articles](#) - [All 6 versions](#)

---

durable read change data page flush

Search

---

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2010 Google